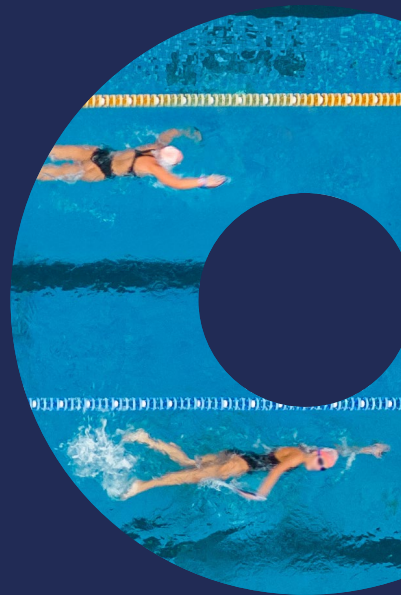


Feeding the Brisbane 2032 Games



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Australia's Food and Beverage Accelerator (FaBA) acknowledges the Traditional Owners and their custodianship of the lands where we live and work.

We pay our respects to their Ancestors and their descendants, who continue cultural and spiritual connections to Country.

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Foreword

As Queensland prepares to host the Brisbane 2032 Olympic and Paralympic Games, we stand at a pivotal moment for Australia's food and beverage ecosystem. Feeding an event of this scale is an extraordinary undertaking, one that stretches far beyond logistics. It is an opportunity to demonstrate who we are: a nation that celebrates diversity, champions innovation and respects the deep cultural foundations of Australia's First Nations people, who have contributed to our food systems for tens of thousands of years.

Brisbane 2032 represents a powerful opportunity to profile all that Australia has to offer – to athletes, fans, tourists and workers. Through the Games, Australia can deliver an important legacy about food sovereignty, sustainability and substance, showcasing local capabilities and modern innovations that are shaping our world-leading food system.

At the same time, Brisbane 2032 arrives at a moment of extraordinary technological acceleration. Artificial Intelligence (AI) is reshaping food production, distribution and experience at unprecedented speed. By 2032, AI will underpin demand forecasting, safety assurance, personalised nutrition, accessibility and real-time information for athletes, workers and visitors. Used responsibly, it offers a powerful opportunity to reduce waste, lift productivity and reinforce Australia's reputation for clean, safe and trusted food.



Dr Chris Downs

FaBA Director

[https://qaafi.uq.edu.au/
profile/13135/christopher-downs](https://qaafi.uq.edu.au/profile/13135/christopher-downs)

This White Paper demonstrates what can be achieved when industry, government, researchers and communities come together with a shared purpose. The Games provide a catalyst – not only to deliver world class food experiences but to accelerate a more inclusive, sustainable and technologically enabled food future for Queensland and Australia.

I commend this report to all those working to ensure Brisbane 2032 leaves a legacy worthy of the moment.

From the editor

The Brisbane 2032 Games provide a unique opportunity to showcase to the world the high-quality and nutritious food produced in Brisbane and the region. Ensuring appropriate provision of food and associated services - during the Games and beyond - is critical to create an enduring legacy for the region and for Australia.

This White Paper, an initiative of the FaBA Innovation Pathways Program, is the result of a roundtable involving 80 experts from industry, government and academia. It examines challenges and identifies opportunities and recommendations for policy and practice across the food supply chain.

- Chapter 1 outlines the requirements for **food production**, highlighting the need for coordinated planning to supply large volumes of fresh and processed foods reliably while maintaining commitments to domestic and export markets.
- Chapter 2 turns to **manufacturing**, identifying a complex set of challenges including cost pressures, regulatory barriers, workforce and skills shortages and infrastructure constraints. It also underscores the opportunity to showcase Australian indigenous ingredients and flavours and the potential to strengthen local manufacturing capabilities through smart packaging, digital traceability, and reducing reliance on imports.
- Chapter 3 focuses on **service workers**, emphasising that workers will provide not only meals but memories. Priorities include developing a skilled, full-time workforce, mobilising volunteers, attracting international talent, and is an opportunity to nurture future leaders.
- Chapter 4 highlights the criticality of food and beverage requirements of the **athletes**. While historically attention has centred on the logistics of feeding large populations within constrained timelines, it is imperative that the varied, individualised dietary practices of elite athletes are recognised, including food accessibility, cultural relevance, familiarity and food safety.
- Chapter 5 shifts to **tourists as consumers** and stresses how technology – particularly artificial intelligence (AI) – will guide food choices potentially eclipsing traditional marketing and word of mouth. Visitors will expect seamless modern experiences of Australian food with a focus on quality, authenticity and a strong sense of place.
- Chapter 6 considers **fans and families as consumers** at the Games and beyond. Today's fans increasingly expect their individual values and dietary needs to be recognised. This means expanding menus to include allergen-friendly, plant-based and culturally inclusive options.

- Chapter 7 highlights the role of **AI-enabled marketing and communication**. It stresses the need for an ethical AI framework that ensures transparency, explainability and appropriate human oversight. While AI brings significant capabilities, retaining human interaction is imperative.
- Chapter 8 stresses the importance of **logistics, policy and food waste management** systems at the Games. Investments in transport and waste infrastructure - such as composting facilities and recycling stations – as well as in technology and education, is critical to prevent strain on the local economies, the food supply chain and to manage waste sustainably and ethically.



I trust this co-created White Paper is a catalyst for further collaboration and action, shaping policy, practice and innovation to strengthen Australia's food system leaving an enduring legacy.

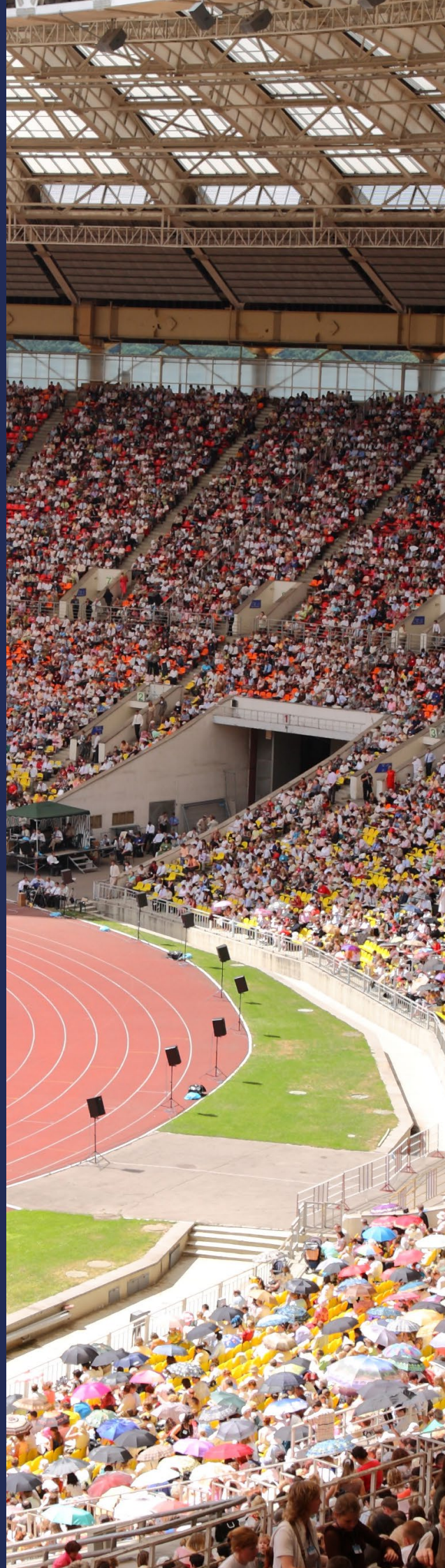
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Pictured (left to right): Professor Lisa Ruhanen, Professor Janet McColl-Kennedy, Professor Bruce Abernethy



Chapter 1

Food production



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Introduction

Feeding the Brisbane 2032 Olympic and Paralympic Games (Brisbane 2032) presents a significant organisational task for Queensland and Australia. Beyond its scale, the event may place heightened expectations on agricultural production systems to deliver safe, high-quality, nutritionally appropriate and culturally diverse foods for athletes, team officials, volunteers, tourists, fans and local communities. Food production forms the foundation of the entire Olympic food system. Without reliable, adaptable and resilient production networks, downstream functions such as processing, logistics, catering and food service cannot operate effectively.

The Games represent a rare convergence of logistical intensity, strict food safety requirements and heightened global attention. As the first Olympics hosted in Australia since Sydney 2000, the event provides a unique opportunity to showcase Australia's agricultural capability, sustainability leadership, biodiversity, Indigenous food traditions and commitment to clean, safe and ethically produced foods. Meeting this challenge benefits

from coordinated planning across farming enterprises, Indigenous food producers, supply chain intermediaries, government bodies and research institutions.

A dynamic consumer landscape: anticipating food preferences in 2032

Food consumption patterns continue to evolve leading up to 2032. There are various drivers towards fresher, healthier, minimally processed and more culturally diverse foods. Demographic change and globalisation continue to influence states and expectations, with younger consumers influencing interest for nutrient-dense foods, performance-oriented products, plant-forward diets, functional ingredients and environmentally responsible production.

Australia's multicultural population brings an expectation of international cuisines, culturally specific dietary practices and foods that reflect the diverse identities of visiting spectators, workers and athletes. There appears to be growing consumer interest toward transparency, provenance, sustainability and authenticity. These preferences imply that agricultural production for Brisbane 2032 may need to be flexible, diverse and

capable of demonstrating ethical and environmental performance at scale.

“Brisbane 2032 is a once in a generation chance to showcase Queensland food as clean, safe and ethically produced, while building innovative and climate resilient production systems that endure beyond the Games.”

Jacqueline Wilson-Smith, CEO, LetsCo Network

Legacy ambitions for Queensland and Australia

Legacy is a central theme for Brisbane 2032, and the agri-food sector could present potential benefits. The Games offer an opportunity to stimulate long-term improvements across production systems, sustainability practices and market development. Five specific legacy opportunities are:

- i. Catalysing investment in climate-resilient, low-emission and regenerative agricultural practices
- ii. Strengthening Indigenous-led enterprises and sustainably expanding native food production
- iii. Building regional development through new infrastructure, connectivity and workforce capability
- iv. Enhancing domestic and export market opportunities by demonstrating quality and sustainability on the global stage
- v. Supporting integrated producer networks that remain active after the Games

These potential legacy impacts suggest the value of a thorough planning approach that supports both event readiness and long-term transformation of Queensland's agricultural sector.

This chapter focuses on production-related requirements that underpin success in feeding the Brisbane 2032 Games. It examines the current and emerging challenges facing production systems, identifies key opportunities and proposes actionable recommendations for policy and practice. The scope encompasses mainstream agricultural commodities, Indigenous foods, alternative proteins and emerging sustainable production models. While connected to themes such as manufacturing, logistics and consumer behaviour, the chapter maintains a primary production lens.

Challenges

Production capacity and supply security

Ensuring adequate, consistent and high-quality food production for the Games is a significant challenge. The event's narrow operational window requires producers to deliver large volumes of fresh and processed foods reliably, while maintaining supply to domestic and export markets. Supply security is threatened by climatic variability, global supply chain disruptions and the increasing frequency of extreme weather events. Australian agriculture faces risks of yield variability, livestock heat stress and seasonal unpredictability (Henry et al., 2018). Producers also

face escalating input costs, including fertilisers, irrigation water, packaging

materials and feed. Inflation and rising energy and fuel prices further erode profitability and may limit capacity to scale production. These cost pressures introduce uncertainty for producers considering investment in infrastructure or expanded production capacity in the lead-up to 2032.

Climate change and environmental constraints

Climate change is widely considered a major challenge to agricultural productivity. Increased frequency of droughts, floods, heatwaves and extreme weather events affect crop pressures (Yang et al., 2024). Queensland's agricultural regions are particularly vulnerable, with increasing heat stress, evapotranspiration demand and rainfall intensity possible.

Sustainable sourcing expectations for the Games will require producers to accelerate adoption and improvement of technologies, reduce food loss, improve water efficiency measures, soil stewardship and low-emission technologies (Springmann et al., 2018). Scaling these practices requires time, training and stable investment. Many producers lack access to the necessary infrastructure, such as water storage, shade systems or precision irrigation technology.

Biosecurity, safety and regulatory complexity

Feeding a global event introduces heightened biosecurity and food safety requirements. Producers are

expected to meet appropriate standards to ensure traceability, compliance and safety for diverse groups, particularly athletes. Compliance frameworks such as Food Standards Australia and New Zealand (FSANZ) food standards and good agricultural practices impose significant administrative and financial burdens, especially on small and medium enterprises. Biosecurity, including emerging threats such as plant pathogens or livestock diseases, is one of the greatest threats to Australian agriculture and incidents can significantly disrupt food supplies (DAFF, 2022). Specialised foods required for athlete performance and greater international visitors may involve interstate or international sourcing, adding complexity as well as biosecurity risks.

Workforce and skills limitations

Workforce shortages are a major constraint on agricultural production. Declines in the agricultural labour force, challenges attracting younger workers and shortages of skilled roles such as agronomists, livestock specialists and food safety technicians can present challenges (NFF, 2025; Stevenson, 2025). Workforce limitations make it difficult to scale production, adopt new technologies or ensure compliance with increased monitoring and traceability requirements. Seasonal labour pressures further complicate supply planning, particularly for horticulture, dairy and intensive livestock systems. These shortages may restrict production responsiveness during the Games period.

Technology adoption barriers and infrastructure gaps

Technological innovation could provide opportunities to increase precision, improve resource efficiency and enhance traceability. However, adoption in primary production remains uneven. Barriers include cost, limited digital literacy, poor regional connectivity and lack of integrated data systems. Small-scale producers in particular may have difficulty accessing automation or advanced digital tools. Infrastructure gaps, such as limited cold-chain facilities, storage, renewable energy systems and modern packing infrastructure, restrict the ability of producers to meet the Games' expectations. The absence of data-sharing structures hampers demand forecasting and coordination between producers and downstream partners.

Indigenous food production: structural barriers to scaling

Australian native foods may have potential for inclusion in Olympic food offerings, yet Indigenous enterprises face structural challenges that limit scalability. Constraints include land access, limited capital investment, inconsistent wild-harvest yields, lack of processing infrastructure and regulatory barriers associated with bringing traditional foods into formal supply chains (Knorr & Augustin, 2025). There is also a need to ensure culturally safe and equitable participation. Without Indigenous leadership and co-governance, there is a possibility that commercial interest in native foods could reproduce extractive practices.

Scaling Indigenous food production for the Games will require long-term investment, co-designed pathways and respect for cultural, ecological and intellectual property rights.

Fragmentation, coordination gaps and limited collaboration

Lack of coordination across the food system inhibits the ability to prepare effectively for the Games. Producers often have limited visibility of downstream requirements, including specific product types, volumes and timing. Caterers and procurement teams may also have little understanding of production cycles or constraints. This disconnect limits producers' ability to plan, diversify or invest in scaling production. Improved coordination, shared forecasting and early engagement could be beneficial for aligning production capacity with demand.

Financial pressures, inflation and rising input costs

Producers are contending with rising operational costs due to inflation, labour costs, energy prices, fuel expenses and increasing costs of fertilisers and fodder (ABARES, 2025). These financial pressures may limit capacity for innovation and limit willingness to invest in sustainability certification, technology adoption or expansion of production. Many small and medium producers are already operating with constrained margins, making participation in Olympic supply chains challenging without targeted support mechanisms.

Opportunities

Brisbane 2032 presents a transformative opportunity for Queensland's agri-food sector. An immediate platform to feed a global event at world-class standards and a once-in-a-generation chance to embed long-term transformation. Beyond meeting immediate demand for safe, high-quality and culturally diverse foods, the event can catalyse long-term improvements in production systems, sustainability practices and market positioning. Opportunities span production innovation, Indigenous participation, market development and sustainability leadership, with direct relevance to evolving consumer expectations in 2032 and the state's legacy ambitions.

Elevate Queensland's "clean, green and safe" food brand at scale

Queensland's year-round production capacity across tropical, subtropical and temperate zones, combined with robust biosecurity and food safety systems, positions the state to showcase premium, ethically produced foods to a global audience. By foregrounding provenance, certifications and transparent sustainability claims, producers can capture premium pricing and open new trade pathways during and beyond the Games. This is closely aligned with Brisbane 2032's sustainability and impact portfolios and with the state's 25-year blueprint for competitive, value-adding primary industries that emphasises market growth and brand positioning.

(DPI, 2025; Godfray et al., 2024). An example would be dedicated "Queensland Provenance" menu themes—supported by on-pack QR traceability and verified sustainability claims—that feature seasonal fruits and vegetables, premium beef and seafood sourced under audited biosecurity and animal-welfare regimes.

Embed indigenous culture and native foods through co-designed supply chains

There is a unique opportunity to elevate Indigenous food traditions and native ingredients (e.g., native citrus, herbs, seeds) as a signature of Brisbane 2032, while building equitable, culturally safe pathways for First Nations enterprises. Co-governance, fair IP arrangements and investment in community-led processing capacity can turn the short-term demand spike into enduring capability and market presence. This aligns with Brisbane 2032's Reconciliation Action Plan focus and Queensland's priority to expand First Nations agriculture and Indigenous-owned businesses. Roundtable participants emphasised authenticity, health properties and story-rich foods that resonate with premium markets—elements that can differentiate offerings and strengthen long-term branding (Craw, 2008; Lopes et al., 2023; Dipu et al., 2025). An example is a First Nations chef-led "Native Pantry" initiative across athlete villages and public venues, co-designed with Indigenous producers, featuring seasonally available native ingredients and pathways for post-Games retail and export.

Accelerate AgTech adoption and end-to-end digital traceability

The Games provide a high-visibility testbed to scale precision agriculture (e.g., variable-rate irrigation and fertilisation), automation and robotics, and farm-to-fork data systems that assure safety, provenance and real-time supply coordination. Queensland's blueprint prioritises accelerated innovation, fit-for-purpose infrastructure and "ease of business" settings—creating the enabling environment to deploy integrated sensors, grower portals and interoperable traceability. Roundtable participants underscored the value of early technology transfer at farm level and data democratisation to forecast preferences and tailor supply quickly to athletes, fans and diverse demographic segments (Ceccarelli et al., 2022; Getahun et al., 2024;). An example is a cross-industry "Olympic Traceability Cloud" linking growers, certifiers, caterers and venues, with live dashboards for food safety flags, allergen control, sustainability metrics and menu forecasting.

"By aligning producers, processors and caterers immediately using actual Games demand and product information; facilitated with data democratisation and digital traceability, we can deliver locally grown, manufactured and branded world class food with 100% local provenance at Olympic scale. This will give us local legacy on the worldwide stage."

**Glenn Pereira, Category Manager,
Tropical Fruit Direct**

Diversify protein sources and align with plant-forward performance nutrition

Global trends toward plant-forward diets, functional ingredients and lower-emission proteins create scope to diversify Queensland's protein portfolio for athlete and visitor menus—without compromising performance. Plant-based proteins and fermentation-derived ingredients can reduce land and emissions intensity and satisfy demand for nutrient-dense, minimally processed options. While cellular agriculture is earlier stage, precision fermentation and mycoproteins are ready for curated menu integration and legacy trials, reinforcing Queensland's positioning in future foods (Etzbach et al., 2024; Redmond, 2025). An example is "Performance Plant Proteins" modules for athletes—combining legume-based mains, fermentation-derived protein sides and native plant phytonutrient components—paired with clear provenance and nutrition labelling.

Scale climate-resilient and regenerative production

The Games demand can be the catalyst for wider adoption of low-emission practices, precision water management, soil stewardship and on-farm renewable energy. Queensland's Prosper 2050 priorities encourage place-based innovation and resilience. Producers can leverage Olympics-linked contracts and visibility to invest in protected cropping, drought-smart systems and carbon-neutral production pathways that deliver both competitive

advantage and community trust. An example is protected-cropping precincts near metropolitan venues supplying herbs and salad greens with verified water efficiency and renewable energy inputs, publicly reporting carbon and biodiversity outcomes.

Build regional processing, cold-chain and workforce capability as a legacy

Shared, multi-user infrastructure—processing, storage, refrigerated transport, connectivity—can reduce operating costs and improve reliability across dispersed regions, while strengthening rural employment and skills. The Games can anchor co-investment in regional hubs and workforce upskilling in food safety, traceability and AgTech operations, meeting immediate event standards and leaving durable productivity gains. Roundtable participants highlighted infrastructure gaps and workforce limitations. The Games timelines can concentrate partnerships and investment to close these gaps.

An example is a “Southeast Queensland Olympic Food Hub” offering HACCP-ready processing lines, rapid-test labs, cold-chain consolidation and training suites for growers and small producers.

Create market expansion, direct producer-to-consumer channels and regional branding

The Games can open premium and mainstream markets via direct producer-to-consumer channels (e.g., curated farmers’ markets at fan zones, branded e-commerce packs)

and novel business models tailored to a diverse, international consumer base. Roundtable participants saw real scope to leverage the Games spotlight to establish enduring trade and branding legacies; pairing live narrative content (origin stories, cultural significance) with product availability can convert visibility into long-term demand. The importance of regional branding is emphasised: farmers and growers can potentially capture premium pricing by leveraging the Games spotlight for their unique products. The sector can use this momentum to expand economic horizons, establishing enduring trade, branding, partnership legacies and an opportunity for regional growers to showcase provenance of their produce.

An example is “Athlete Village Boxes” and “Fan Taste Boxes”—seasonal, provenance-verified assortments, with embedded digital storytelling and post-Games subscription options.

“Brisbane 2032 should be used to create enduring market pathways for regional food and agribusiness by building collaboration, scaling innovation and investment, and turning short term event demand into long term regional growth.”

Nicole McNaughton, CEO, Food and Agribusiness Network (FAN)

Align menu innovation with demographic trends and food safety-by-design

Generation Alpha's preference for transparent, functional, culturally diverse foods and the 55+ demographic's focus on healthful,

minimally processed options point to differentiated menu strategies. The opportunity is to institutionalise menu innovation workflows—consumer segment forecasting, nutrition-performance integration, allergen and recall risk screening, and early identification of vulnerable ingredients—embedded in culinary leadership and cross-disciplinary teams: nutrition, food safety, cultural advisors. This strengthens event delivery and establishes best-practice standards that persist post-Games (Moschella, 2025). An example is a multidisciplinary “Menu Lab” that iterates athlete, workforce and fan menus quarterly from 2027 onwards,

using live consumer insights, supply risk data and traceability outputs to optimise dishes for health, safety and cultural fit.

Why these opportunities matter

Collectively, these opportunities operationalise Brisbane 2032’s sustainability and impact ambitions while advancing Queensland’s Prosper 2050 priorities: market growth and value-adding, accelerated innovation, shared infrastructure, workforce capability and ease of business. They respond directly to roundtable insights on authenticity, technology transfer, infrastructure

Pictured (left to right): Glenn Pereira, Nicole McNaughton, Sophie Perisce, Dr Alicia Kennedy, Professor Mark Turner, Professor Yasmina Sultanbawa, Anujani Edirisooriya, Jacqueline Wilson-Smith, Professor Damian Hine



gaps and data-enabled agility, ensuring that Olympic readiness translates into durable regional prosperity, resilient production systems and a stronger global reputation for Queensland food.

Brisbane 2032 represents more than a global sporting event—it is a catalyst for transforming Queensland's agri-food sector. The Games demand a food system that is safe, diverse, sustainable and culturally inclusive, while meeting the nutritional needs of athletes and the expectations of millions of visitors. This challenge also creates a platform to showcase Queensland's clean, green reputation, Indigenous food heritage

and innovation leadership. By embedding climate-smart practices, digital traceability, regional branding and future food technologies, Queensland can deliver world-class performance during the Games and secure enduring benefits for producers, communities and markets. Coordinated policy, investment in infrastructure and skills, and strong partnerships across government, industry and First Nations enterprises will be critical. If implemented effectively, these strategies will leave a legacy of resilience, competitiveness and sustainability—positioning Queensland as a global benchmark for ethical and innovative food production well beyond 2032.



Recommendations for policy and practice

Meeting the Brisbane 2032 Games food requirements—and delivering an enduring legacy—will depend on coordinated policy settings and practical programs that strengthen production capacity, sustainability, equity, and market confidence. The recommendations below translate identified challenges and opportunities into actionable steps, aligned with Brisbane 2032's strategic priorities and Queensland's 25-year blueprint for primary industries.

1. Establish a whole-of-system agri-food coordination taskforce. Form a cross-sector taskforce that brings together government, industry bodies, Indigenous representatives, research organisations, producer groups, caterers and logistics providers. Provide it with a clear mandate to coordinate demand forecasting, procurement standards, risk management and legacy planning. Practice: Stand up a centralised demand and traceability platform that shares menu requirements, volumes, product specifications, allergen and food safety flags, and sustainability metrics with producers and processors in near-real time. Use this platform to align crop calendars and harvest windows with the Games delivery schedules.

2. Embed climate-resilient, low-emission and regenerative production. Introduce targeted grants and tax incentives for precision irrigation, soil stewardship, renewable energy, and verified low-emission practices. Bake sustainability indicators (carbon, water, biodiversity) into procurement criteria to stimulate uptake and reward verifiable performance. Practice: Prioritise protected cropping and controlled-environment systems for high-value, freshness-critical produce (herbs, salad greens), located near metropolitan venues to reduce transport emissions and volatility, consistent with the current state of vertical farming technology.

3. Accelerate AgTech adoption and digital infrastructure. Expand regional connectivity and digital literacy programs to support precision agriculture, automation, robotics, and interoperable data systems; align with “ease of business” reforms that simplify the adoption of new technologies. Practice: Fund technology transfer pathways for small and medium producers, including on-farm automation pilots and end-to-end digital traceability that captures provenance, sustainability claims, allergen control, and compliance with FSANZ standards.

4. Strengthen indigenous participation and native food supply chains. Co-design Indigenous food production and procurement pathways with First Nations leadership, ensuring cultural safety, IP recognition, and equitable commercial terms. Embed targets for Indigenous procurement and participation in the Games food strategy and brand activations. Practice: Invest in community-led processing infrastructure and market development for native ingredients. Integrate Indigenous culinary leadership in menu planning to present authentic, therapeutic, and culturally significant foods that can transition to post-Games retail and export markets.

5. Diversify protein sources and support future foods. Establish R&D and commercialisation funding streams for plant-based proteins, mycoproteins, and precision-fermentation ingredients that meet performance nutrition standards and reduce land-use intensity. Practice: Pilot performance-oriented plant-forward menus for athletes, integrating legume-based mains and fermentation-derived protein sides with transparent nutrition/provenance labelling; evaluate acceptance and operational feasibility to inform broader market scaling.

6. Build regional processing, cold-chain and shared logistics capacity. Co-invest with industry in multi-user regional hubs (processing, storage, rapid-test labs) and upgrade cold-chain corridors to Olympic standards, strengthening resilience and reducing food loss. Practice: Develop workforce training in HACCP compliance, traceability operations, and AgTech maintenance for producers and food businesses, addressing labour shortages and skills gaps identified by stakeholders.

7. Implement a consumer insight and menu innovation framework. Establish a Menu Innovation Lab to continuously forecast demographic trends (Generation Alpha and 55+), cultural preferences, and nutritional needs, integrating food safety-by-design protocols (allergen control, recall and fraud risk screening). Practice: Institutionalise quarterly menu iterations from 2027, anchored in live demand data, producer feedback, and traceability outputs, to optimise taste, health, cultural relevance, and supply security across athlete villages, staff canteens, and fan zones.

8. Amplify provenance, branding and market legacy. Launch a Queensland Provenance Program aligned with Brisbane 2032 brand and engagement strategies to promote local products domestically and internationally, leveraging sustainability and biosecurity credentials. Practice: Create direct-to-consumer channels (e-commerce, curated "Athlete Village Boxes" and "Fan Taste Boxes," agri-tourism experiences) with digital storytelling to convert visibility into durable market demand and premium positioning.

9. Strengthen biosecurity, safety and regulatory efficiency. Harmonise regulatory settings and streamline compliance processes ("outcomes-based regulation") for producers participating in the Games supply chains, while maintaining robust biosecurity and food safety standards. Practice: Provide compliance support services (templates, training, rapid advisory), especially for SMEs and Indigenous enterprises, covering FSANZ standards, allergen control, traceability, and biosecurity protocols to reduce administrative burden and risk.

10. Address workforce and skills limitations. Implement targeted workforce programs across regions to build digital/data-enabled AgTech skills, food safety expertise, and logistics capability; partner with universities, TAFE and industry training providers to create career pathways. Practice: Subsidise micro-credentials in traceability operations, protected-cropping systems, and circular economy applications, with flexible delivery for producers and regional workers.

11. **Mobilise finance and investment.** Establish blended-finance vehicles and investment attraction programs for sustainable production, shared infrastructure, and Indigenous enterprises, signalling stability and clear returns to private capital. Practice: Offer time-bound procurement guarantees and offtake agreements for the Games-linked volumes to de-risk producer investment in expansion or modernisation ahead of 2032.

12. **Governance, monitoring and benefits realisation.** Adopt a formal Monitoring and Evaluation Framework for the agri-food program, aligned with Brisbane 2032's Benefits Realisation approach and Queensland's rolling five-year action plans, with public reporting on sustainability, inclusion and regional economic outcomes. Practice: Track key indicators (supply reliability, food safety incidents, sustainability performance, Indigenous participation, workforce training completions, SME inclusion, market legacy metrics) and use adaptive management to reposition policies and programs as needed ahead of 2032.

Pictured: Jacqueline Wilson-Smith



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Pictured (left to right): Glenn Pereira, Dr Catherine Robinson, Nicole McNaughton





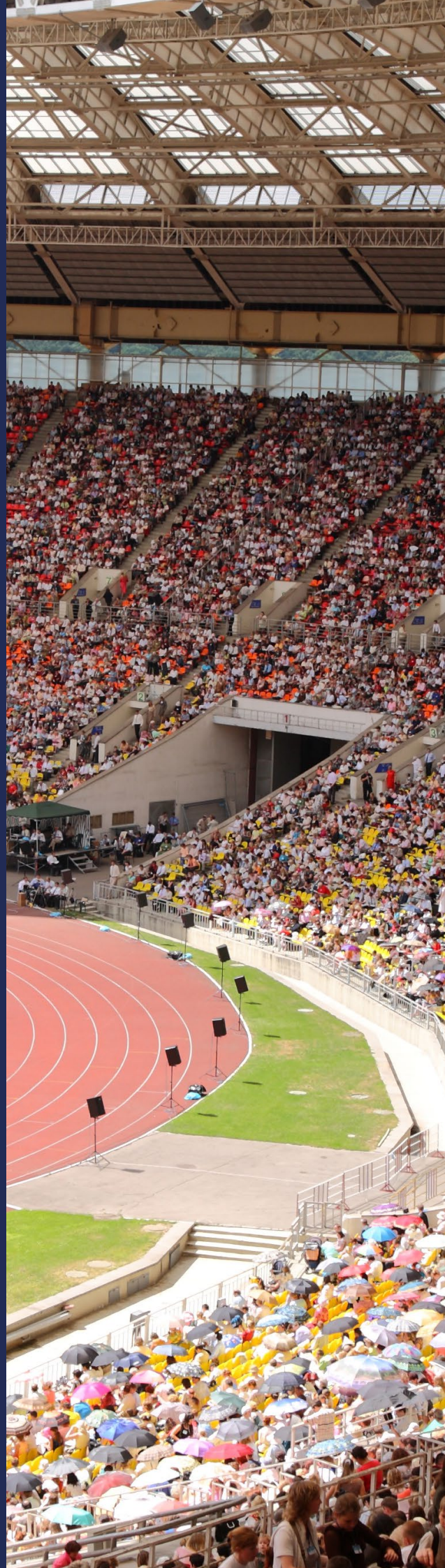
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CUSTOMS HOUSE
— BRISBANE —

Chapter 2

Manufacturing



Leads: Nidhi Bansal and Jiahua Shi

Rimjhim Agarwal, Jason Kidd, Kai Knoerzer, Katherine La Macchia, Saurabh Mahajan, Sam Musson, Julie Shelton, Heather Shewan

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Introduction

The Brisbane 2032 Olympic and Paralympic Games (Brisbane 2032) represent more than a global sporting event - it constitutes a strategic opportunity to demonstrate Australia's capability to design, manufacture and deliver food at unprecedented scale while meeting the highest standards of safety, nutrition, sustainability and cultural inclusivity (Brisbane Organising Committee for the Olympic and Paralympic Games, 2023). With over 15,000 athletes, officials, volunteers and millions of visitors expected during Brisbane 2032, it will require the coordinated production and delivery of multiple million meals across a condensed timeframe, encompassing diverse cuisines, cultural preferences, dietary needs and nutrition requirements (Cui et al., 2022). The manufacturing and processing systems that underpin this task will therefore be central to the success of Brisbane 2032.

Importantly, Brisbane 2032 should not be framed as an isolated operational challenge. Participants at the Manufacturing table emphasised that Brisbane 2032 should be treated as a catalyst for long-term transformation of Australia's food manufacturing sector. The visibility of Brisbane

2032 offers a rare and precious opportunity to showcase Australian manufacturing excellence to global audiences, international buyers and investors, while accelerating reforms and investments that would otherwise take decades to materialise.

Australia's food and grocery manufacturing sector is already the largest component of national manufacturing, contributing significantly to GDP, employment and exports, particularly in regional areas (Australian Food & Grocery Council, 2023). However, the sector faces persistent challenges including high input costs, constrained margins, skills shortages and underinvestment in advanced manufacturing infrastructure (Manufacturing Australia & L.E.K. Consulting, 2022). Brisbane 2032 arrives at a critical juncture, where strategic alignment between government, industry and research institutes can enable manufacturing systems that are not only fit for purpose in 2032, but resilient, competitive and export-oriented well beyond Brisbane 2032 (Department of Sport, Racing and Olympic and Paralympic Games, State of Queensland, 2023).

This chapter summarises insights from the Manufacturing table to identify

the key challenges, opportunities and policy recommendations associated with delivering food manufacturing for Brisbane 2032. It positions manufacturing as both an enabler of the Games delivery and a legacy asset for Australia's food system, with a focus on building a resilient, innovative, and globally competitive industry.

Challenges

Participants identified a complex set of challenges confronting Australian food manufacturing in the context of Brisbane 2032. Although many of these challenges are longstanding, the scale, visibility and fixed timelines of Brisbane 2032 markedly amplify their significance.

Cost pressures

Cost pressures were consistently identified as a critical constraint. Australian food manufacturers operate in a high-cost environment characterised by rising energy prices, labour costs, logistic expenses and compliance burdens. These pressures are compounded by limited ability to pass costs through supply chains, particularly in highly concentrated retail markets (Department of Natural Resources and Mines, Manufacturing and Regional and Rural Development, State of Queensland, 2025). Participants noted that without targeted policy support or co-investment mechanisms, manufacturers may struggle to justify capital expenditure required to service Olympic-scale demand.

Regulatory complexity

Regulatory complexity also emerged as a significant barrier. Food manufacturers must navigate overlapping state, national and international regulatory frameworks governing food safety, labelling, packaging, allergens and sustainability claims. Participants highlighted that regulatory uncertainty could slow innovation, particularly for novel products, packaging formats or processing technologies that could otherwise enhance efficiency and resilience for the Games delivery. Introducing Indigenous ingredients that may lack global recognition or regulatory clarity along with ensuring compliance with international food safety standards, halal certification, and allergen labelling poses challenges.

Workforce availability and skills shortages

Workforce availability and skills shortages also represent major challenges. The sector faces chronic shortages in both operational roles and advanced technical capabilities, including automation, digital systems, food safety engineering and quality assurance. The compressed timeline leading to 2032 intensifies the need for rapid skills development, yet current training pathways are often misaligned with modern food manufacturing requirements.

Infrastructure constraints

Infrastructure constraints further complicate scale-up. Many Australian manufacturing facilities

are optimised for steady-state production rather than rapid surges in demand. Limitations in cold storage, warehousing, transport logistics and energy infrastructure may restrict the ability to respond flexibly to the Games requirements. Regional manufacturers, while well positioned to contribute to Brisbane 2032, often face additional infrastructure and connectivity challenges.

Planning under exponential technological change

Planning under exponential technological change, is a key challenge for manufacturing systems supporting Brisbane 2032 as technological capability, particularly in Artificial Intelligence (AI), is evolving exponentially rather than linearly. Planning approaches based on incremental improvement risk underestimating the scale of change expected by 2032. AI capabilities are already doubling on the order of months, suggesting that systems designed today must be adaptable to levels of intelligence, autonomy, and integration far beyond current norms. Recognising and planning for exponential change early is essential to avoid locking in rigid infrastructure and to ensure that manufacturing systems remain flexible, upgradeable, and future-ready.

Climate and environmental risks

Climate and environmental risks are associated with challenges to consistent food production, with increasing variability in weather patterns and natural disasters in Queensland, such as floods and

bushfires that can disrupt supply chains and manufacturing operations. In addition, the scale of water supply, wastewater treatment, and waste management required to support Games-time food production must be carefully planned and managed to ensure environmentally sustainable and resilient operations.

Innovation timelines and consumer insights

Innovation timelines and consumer insights present a critical challenge for manufacturers, as the development of new food products typically requires a minimum of 20 weeks from concept to market, which is a timeframe that may be insufficient without early and coordinated planning. To effectively meet the needs of the Olympic and Paralympic audiences, manufacturers will also require robust demographic forecasting, including visitor age profiles, cultural backgrounds, and dietary preferences, as well as analytical capability to distinguish enduring consumer trends, ensuring product relevance during Brisbane 2032 and viability beyond.

Finally, participants emphasised the risk of short-termism. Without clear post-Games commercial pathways, manufacturers may be reluctant to invest in innovations perceived as one-off opportunities. There is a risk that investments made solely to service Brisbane 2032 may become stranded assets. Aligning Olympic-driven manufacturing with long-term domestic and export markets is therefore seen as essential to avoid inefficiencies and ensure enduring value.

Opportunities

Despite these challenges, the Brisbane 2032 Games present substantial opportunities to accelerate innovation and reposition Australia's food manufacturing sector. Participants consistently framed Brisbane 2032 as a platform to demonstrate advanced manufacturing capabilities that integrate efficiency, sustainability and provenance.

Showcase Australian flavours

Showcasing Australian flavours and ingredients as a point of international distinction. Brisbane 2032 offers a rare platform to introduce global audiences to Australia's distinctive and diverse food culture, spanning premium seafood, grass-fed meats, tropical fruits, and Indigenous ingredients such as wattle seed, lemon myrtle, and finger lime. These flavours and ingredients create opportunities to develop limited-edition, high-value food products that celebrate Australian provenance, culture and quality. Positioned as exclusive Brisbane 2032 offerings, such products can appeal to international visitors, athletes and domestic consumers alike, while reinforcing Australia's reputation for premium, safe and sustainable food. Importantly, the limited availability of some native ingredients can be reframed as a strength, supporting narratives of rarity, authenticity and place-based value rather than volume-driven production.

"We are seen as a green, clean and sunny country worldwide. Manufacturers should have pride in their produce. The unique climate of Australia offers us a good advantage."

Dr Katherine La Macchia, General Manager, Grains & Legumes Nutrition Council

Innovating manufacturing at the Olympic scale

Accelerating innovation in food manufacturing through Olympic-scale application. Australia has an established track record in food innovation, particularly in on-the-go nutrition formats such as protein bars, smoothies and functional beverages. Brisbane 2032 provides an opportunity to accelerate this innovation by enabling manufacturers to test, scale and showcase advanced food manufacturing capabilities under high-volume conditions. By leveraging demand with longer-term commercial pathways, innovations developed for Brisbane 2032 can support export readiness and enhance the ongoing competitiveness of Australia's food manufacturing sector. Two major areas are summarised through the discussion as below.

Launch shelf-stable, value-added products for large-scale catering and retail

Producing nutritious, high-quality shelf-stable foods is essential for feeding large numbers of people efficiently and safely during major events, while reducing reliance on cold chains and improving supply resilience. Advances in thermal

processing, drying, fermentation and packaging technologies enable long-life products, such as ready-to-eat meals, protein snacks and long-life beverages, which are suitable for athletes, volunteers and visitors, with clear post-Games export potential.

Australian initiatives already demonstrate capability in this area, including the Northern Australia Food Technology Innovation (NAFTI) project and CSIRO's Shelf Stable Food Program, which are developing technologies to preserve nutrition and flavour while extending shelf-life (CSIRO, 2026). Using Olympic-scale demand to accelerate these developments represents a strategic opportunity to strengthen Australia's food manufacturing sector beyond 2032.

Integrate smart manufacturing and digital technologies

Smart and digital manufacturing is identified as a priority opportunity for meeting Olympic-scale demand while improving efficiency, consistency and traceability and reducing waste and labour intensity. The adoption of automation, robotics, AI agents, digital twins and Internet of Things (IoT)-enabled monitoring systems can not only streamline production but can also enhance quality control and optimise supply chains (McColl-Kennedy & Hine, 2024). Building on this foundation, AI-enabled agents are expected by 2032 to play an increasingly important roles in orchestrating complex food and manufacturing systems in real time. Such agents could dynamically balance production schedules,

energy use, logistics, and waste management based on demand signals, sustainability targets, and operational constraints. Brisbane 2032 provides a real-world demonstration platform for deploying these technologies with visible success, helping to de-risk adoption for smaller manufacturers and attract further private investment. Existing examples demonstrate feasibility, including robotic production lines enabling high-volume output with minimal waste, facilities supported by CSIRO and Arm Hub can help in integrating digital traceability systems and predictive analytics in food processing.

Strengthen packaging innovation and provenance communication to support sustainability and differentiation

Packaging innovation will play a critical role in delivering food efficiently and responsibly for Brisbane 2032, while reinforcing Australia's reputation for safe, sustainable and high-quality food. We could leverage our relationship with Australian Packaging and Processing Machinery Association (APPMA) which focuses on sustainable packaging as well as the use of thin films and other innovations to extend shelf life and ensure freshness. Beyond its functional role, packaging represents an important interface for traceability, consumer engagement and provenance communication at scale. Discussions highlight the following key opportunity areas for Australia's food manufacturing sector.

“Circular bioeconomy is an opportunity for Australia’s Food and Beverage sector. Large manufacturers are increasingly embedding circularity requirements into contracts with ingredients suppliers.”

Dr Kai Knoerzer, Principal Research Scientist, CSIRO

Embed smart packaging and digital traceability at scale

Smart packaging technologies, particularly 2D barcodes such as QR codes and GS1 Digital Links, offer significant opportunities to enhance traceability, food safety and transparency across complex supply chains. These technologies enable real-time access to information on expiry dates, batch numbers, ingredient origin, allergen content and recycling instructions, supporting both operational oversight and consumer trust. Large-scale deployment during Brisbane 2032 could help reduce food waste, strengthen recall readiness and support allergy-sensitive consumers through batch-level information access.

Advance sustainable packaging materials aligned with circular economy principles

Australia is well positioned to demonstrate leadership in sustainable packaging through the development and application of biodegradable, compostable and recyclable materials (Gain et al., 2025). Emerging solutions include plant-based polymers and cellulose-derived films that offer effective

moisture and oxygen barriers while reducing environmental impact. When combined with digital labelling tools, these materials can also support clearer communication of sustainability credentials and end-of-life disposal pathways. Applying such innovations at scale during Brisbane 2032 can contribute to waste reduction objectives, meet growing consumer expectations for environmentally responsible packaging, and create scalable solutions suitable for post-Games commercialisation and export markets.

Leverage provenance and geographical labelling to support authenticity and regional value creation

Clear and credible provenance communication through packaging can enhance product authenticity, build consumer confidence and support premium positioning. Mechanisms such as geographical indicators and Country-of-Origin labelling standards enable manufacturers to highlight regional sourcing, production quality and local value creation. Embedding provenance storytelling into food offerings provides an opportunity to differentiate Australian products in global markets, strengthen trust in Australian food systems, and support regional manufacturing and agricultural economies beyond Brisbane 2032.

Expanding retail and airline collaboration to extend reach and reinforce Australia's food identity

Retailers and airlines are identified as important partners in extending the visibility and reach of Australian-made food products associated with Brisbane 2032. These channels offer high-impact touchpoints with international visitors, athletes and domestic consumers, enabling Olympic-linked food products to be experienced beyond competition venues. Strategic collaboration with airlines, airports and retailers can enhance distribution, support brand storytelling and create lasting associations between Australia's food culture and Brisbane 2032.

Integrate Australian ingredients and products into in-flight and catering service

Airlines and in-flight catering services provide a unique platform to showcase Australian ingredients and manufacturing capability to global audiences. The growing use of native and locally sourced ingredients in airline menus demonstrates strong alignment with provenance and sustainability narratives.

Partnerships with domestic and international airlines, as well as major inflight caterers, can enable Australian manufacturers to supply value-added components and finished products at scale, reinforcing quality, authenticity and consistency. The volume and regularity of airline catering also provide opportunities to test scalable manufacturing models relevant to the Games delivery.

Develop airport and in-flight retail formats for shelf-stable, souvenir-style food products

Airport and in-flight retail environments offer ideal platforms for compact, shelf-stable food products that are easy to transport and suitable for gifting. Olympic-themed packaging applied to well-recognised Australian products—such as biscuits, confectionery, preserves and native-ingredient snacks—can enhance their appeal as edible souvenirs. Curated retail offerings within airports and onboard aircraft can highlight Australian provenance, support premium positioning and create additional commercial pathways for manufacturers beyond traditional retail channels.

Collaborate with supermarkets on Olympic-branded, limited-edition product ranges

Supermarkets play a central role in national food distribution and consumer engagement and can amplify the Games-related narratives through limited-edition product launches and themed promotions. Brisbane 2032-branded bakery, snack and ready-to-eat ranges can drive consumer participation, reinforce national pride and showcase Australian manufacturing capability at scale. Importantly, these collaborations allow manufacturers to align short-term promotions with longer-term retail relationships, supporting broader market penetration and post-Games continuity. Positioning Brisbane 2032 to support post-Games markets, domestic capability and regional

resilience. Beyond the delivery of food during Brisbane 2032, importance of designing manufacturing strategies that generate lasting market, capability and regional development outcomes is emphasised. Brisbane 2032 is viewed as a catalyst to strengthen Australia's export position, reduce reliance on imports, and reinforce domestic food systems beyond 2032.

Build export-ready product pathways and international market access post-Games

Brisbane 2032 provides a global platform to introduce Australian food products to international visitors, athletes, media and visiting delegations, creating visibility that can support the development of export-ready product lines aligned with international standards and global consumer preferences. Olympic association and provenance storytelling can support premium positioning in overseas markets and facilitate engagement with international retailers, distributors and trade partners. International experience suggests such exposure can translate into tangible export growth; following the London 2012 Olympics, UK food and beverage exports increased significantly, with brands securing new international contracts as London 2012 functioned as a soft-power mechanism to promote national food identity (Alshikhy et al., 2025).

Revitalise domestic manufacturing capability and reduce reliance on imports

The scale and certainty of Brisbane 2032 demand provide an opportunity to invest in domestic manufacturing infrastructure, particularly in product categories where Australia currently relies on imported commodities. Strengthening local manufacturing capacity can improve supply chain resilience, reduce exposure to global disruptions and support job creation, particularly in regional areas.

Lessons from previous Games highlight that though there was an economic downturn and it took some years for Sydney to recover, longer-term benefits of such investment; infrastructure and logistics upgrades associated with Sydney 2000 contributed to the transformation of Sydney Olympic Park into a multi-use precinct that continues to support events, business activity and food services.

Strengthen domestic food systems and regional economies through coordinated investment

There is increasing potential for Brisbane 2032 to catalyse cooperative manufacturing models that enable small and medium-sized enterprises (SMEs) to collectively meet large-scale demand. Targeted investment in cold-chain infrastructure, storage, logistics and workforce development, particularly in regional areas, can strengthen domestic food systems while supporting skills in food science, logistics and advanced manufacturing. International

experience demonstrates the enduring regional impacts of such approaches; the Barcelona 1992 Games stimulated long-term development of food markets and logistics hubs that continue to support the regional economy, while Sydney 2000 similarly reshaped Homebush into a nationally significant events and food services precinct (Searle, 2012).

Conclusion

Manufacturing and processing will play a decisive role in delivering a successful Brisbane 2032 Olympic and Paralympic Games. More importantly, Brisbane 2032 represents a rare, once-in-a-generation opportunity to reimagine and strengthen Australia's food manufacturing sector for the future. By treating Brisbane 2032 as a catalyst rather than an endpoint, Australia can demonstrate global leadership in advanced, sustainable

and resilient food manufacturing while meeting the immediate demands of a major international event.

Insights from the discussion highlight both the urgency and the scale of this opportunity. Strategic alignment between government, industry and research institutes, which needs to be supported by targeted investment in innovation, infrastructure and collaboration, can ensure that the systems built to feed Brisbane 2032 also deliver long-term economic growth, regional development and export success. The legacy of Brisbane 2032 should therefore be a stronger, more agile food manufacturing ecosystem that champions Australian ingredients, supports regional economies and positions Australia at the forefront of global food innovation well beyond Brisbane 2032.

Pictured (left to right): Dr Jiahua Shi, Dr Heather Shewan, Claudia Lordao



Pictured: Professor Nidhi Bansal



Recommendations for policy and practice

Reflecting on the challenges and opportunities the roundtable identified, the participants proposed seven recommendations aimed at aligning the Brisbane 2032 Games delivery with long-term manufacturing transformation.

1. Prioritise Australian-made and value-added food products through Brisbane 2032 procurement frameworks. Procurement frameworks for Brisbane 2032 should prioritise Australian-made and value-added food products where feasible, supported by clear criteria for food sourcing, branding and appropriate use of the Games intellectual property. Early and transparent procurement signals will enable manufacturers to plan investments, scale capacity with confidence and reduce commercial risk. Strengthening coordination between government bodies, the Olympic organising committee, manufacturers, retailers and researchers is essential to align product development, marketing and distribution strategies.

2. Establish coordinated co-investment models to accelerate manufacturing scale-up and infrastructure readiness. Targeted co-investment mechanisms should be implemented to support capital upgrades in food manufacturing facilities linked to Brisbane 2032 delivery. Aligning federal, state and industry funding, including producer levies and government grants, can enable multiple manufacturers, including SMEs, to collectively meet high-volume demand. Investments should prioritise advanced manufacturing technologies, shelf-stable and functional food capability, logistic and storage infrastructure, and sustainable packaging innovation, with clear pathways for post-Games utilisation.

3. Streamline regulatory pathways to support innovation, inclusion and export readiness. Regulatory reform and harmonisation should focus on reducing unnecessary complexity while maintaining food safety integrity. Priority areas include streamlining approvals for Indigenous ingredients, halal certification and allergen labelling to ensure timely market access. Where appropriate, international standards and mutual recognition frameworks should be adopted to accelerate innovation, support export readiness and reduce compliance burdens for manufacturers operating across multiple markets.

4. Use market intelligence and data-driven planning to guide product innovation and export strategy. Government should commission targeted market studies to forecast visitor demographics, dietary needs and consumption patterns associated with Brisbane 2032. Advanced data analytics can inform product development, capacity planning and demand forecasting. Developing a clear food and beverage innovation roadmap, as well as outlining timelines, regulatory steps and market entry strategies, will provide manufacturers with guidance and confidence to engage effectively with Brisbane 2032 and post-Games export markets.

5. Position Brisbane 2032 as a launch platform for export growth and sustainable product diversification. Brisbane 2032 should be positioned as a platform to support long-term export growth showcasing Australia's sustainability credentials and manufacturing capability. Support should be provided to manufacturers seeking to diversify product lines, including plant-based, culturally diverse and health-focused offerings, and to develop premium product tiers suited to international markets.

6. Embed sustainability and circular economy principles across manufacturing and packaging systems. To maintain Australia's clean and green food reputation, incentives should continue to support circular economy initiatives, including food waste valorisation and sustainable packaging solutions. Government can facilitate collaboration between manufacturers and recycling organisations to scale national recycling capacity and support smart labelling, biodegradable materials and closed-loop packaging systems.

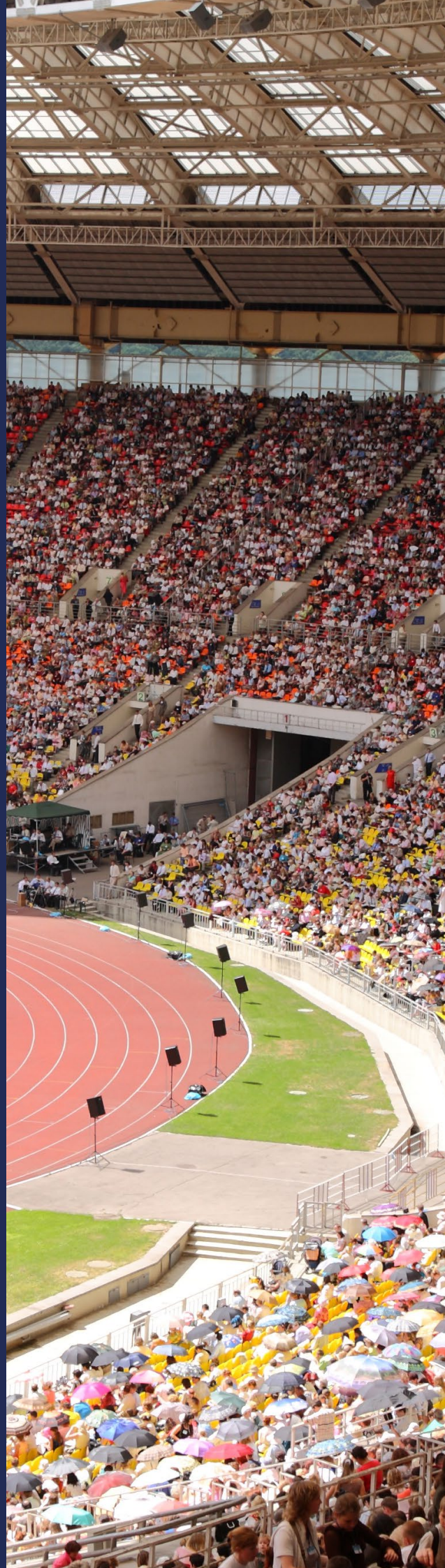
7. Strengthen workforce capability and regional manufacturing hubs through targeted skills development. Addressing skilled labour shortages will require coordinated action between government, industry and education providers. Targeted training and upskilling programs should focus on automation, digital manufacturing, food safety engineering and logistics. Promoting careers in food innovation and sustainability, particularly in regional areas, will support workforce attraction, strengthen local manufacturing hubs and ensure sufficient capability to deliver at Brisbane 2032 scale and beyond. Local manufacturing is also supported by the Department of Natural Resources and Mines, Manufacturing and Regional and Rural Development's Regional Manufacturing Hubs which have dedicated skills professionals who can assist with regional manufacturing skills needs and development. The manufacturing hubs also provide a range of workshops including Lean manufacturing, and host a series of manufacturing leaders forums, providing a platform to discuss barriers to efficiency and productivity.

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Chapter 3

Service workers



Leads: Stefan Jooss and David Solnet

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Introduction

The Brisbane 2032 Olympic and Paralympic Games represent a once-in-a-generation opportunity to transform Queensland's hospitality and food service industries. Beyond the spectacle of sport, the Games offer a moment to reimagine how service work is valued, supported, and sustained. Brisbane's distinct regional economy, defined by its strong small business base, community spirit, and commitment to sustainability, positions it uniquely to set a global benchmark in how a mega-event can empower, rather than exhaust, its service workforce.

Yet, this ambition comes with challenges. The scale of the Games will intensify existing pressures: labour shortages, uneven training access, and rising service expectations (Jobs Queensland, 2023). At the same time, it opens new pathways for collaboration, capability building, and innovation across the service ecosystem (Chandler et al., 2019). Preparing the workforce for 2032 is therefore not merely a logistical exercise; it is a strategic investment in Queensland's people, economy, and reputation on the global stage — but one with significant precedent, as host cities for major sporting events have been navigating this challenge

for decades or more (Lockstone-Binney et al., 2020; Ronaghi et al., 2024).

The role of workers and their value

Workforce development sits at the heart of the Brisbane 2032 Strategic Plan (Brisbane Organising Committee, 2023). The plan's four pillars – Enable, Deliver, Experience, and Impact – each depend on the capacity and capability of Queensland's service workers.

The first pillar, Enable, focuses on building an adaptable and skilled workforce ready for the demands of large-scale event delivery. Initiatives such as targeted training programs and gamified learning models can help future workers develop both technical expertise and a sense of professional pride. These programs must not only fill roles but also cultivate a culture of learning and adaptability across the sector. This pillar will be a major challenge for the planning of the Brisbane 2032 Games.

The second pillar, Deliver, emphasises operational excellence. This is where the workforce's skills, mindset, and motivation directly affect outcomes. From chefs and baristas to logistics managers and volunteers, every individual contributes to the seamless

running of the Games. Integrating technology – from predictive staffing tools to QR-enabled ordering systems – can enhance efficiency while alleviating frontline pressure.

The third pillar, Experience, underscores the human element of the Games. “Every frontline worker will be an ambassador for Brisbane”, notes Associate Professor Stefan Jooss, Business School, The University of Queensland. Service workers are not just employees; they are cultural representatives (Subramony et al., 2021). The way they greet visitors, solve problems, and express pride in their city shapes the world's impression of Brisbane. Fair wages, wellbeing support, and accessible digital tools are critical enablers of that experience.

Finally, the Impact pillar speaks to legacy. Workforce investment must outlive the Games. By embedding training, certification, and fair employment practices, the 2032 Games can lift the overall capability of Queensland's hospitality and food sectors for decades to come. Aligned with the Games' sustainability goals, this workforce strategy should ensure enduring benefits that strengthen communities long after the closing ceremony.

Workers matter not just because they deliver services, but because they embody the values and aspirations of Brisbane 2032. They are end-to-end contributors across the food and hospitality supply chain, experience creators who shape visitor impressions, and legacy builders who will set new industry standards (Subramony et al.,

2023). There is growing evidence that a host city can rebrand itself through a well-prepared, respected workforce (Herstein & Berger, 2013), creating an economic driver and a cultural asset, helping local businesses grow while representing Queensland's distinctive hospitality on a global stage.

Scalability and infrastructure limitations

As food manufacturers aim to scale Artificial Intelligence (AI) solutions across multiple product lines and facilities, they may encounter significant infrastructure challenges. The deployment of AI requires substantial computational resources and specialised hardware, which may not be readily available or economically feasible for all manufacturers. Additionally, integrating AI into existing production systems can require extensive customisation, further complicating scalability efforts. These infrastructure limitations can delay the adoption of AI technologies, impacting manufacturers' ability to remain competitive in a rapidly evolving industry.

Who are the workers?

The Brisbane 2032 workforce will be a tapestry of talent drawn from across Queensland and beyond. It will include seasoned hospitality professionals, emerging Generation Alpha entrants, and countless volunteers contributing to community spirit. Understanding who these workers are – and what they need to succeed – is fundamental to effective planning.

The hospitality sector will anchor the experience. Chefs, waitstaff, baristas, and front-of-house staff will deliver not only meals but memories. Behind them, a vast supply chain will ensure that local produce and manufactured goods flow efficiently to the venues. Producers, manufacturers, and logistics teams, often invisible to the public, are essential to ensuring that the Games' food system runs smoothly.

Volunteers will also play a vital role, continuing a proud tradition from previous events such as the Sydney Olympic Games (Kemp, 2002) and the Gold Coast 2018 Commonwealth Games, as well as other Olympic Games (Alexander et al., 2015). Their contribution goes beyond logistics to fostering community pride and connection. The challenge will be ensuring volunteers complement, rather than replace, paid workers, and that their efforts are recognised as part of a shared workforce ecosystem.

New generations of workers, especially Gen Alpha, will bring different expectations and values. Gamified training platforms, flexible work design, and visible career progression will be key to attracting and retaining them.

“Gamify service delivery; find innovative ways to attract and retain staff by engaging with, and rewarding them, in ways that matter to them. Excite them about what they can do and where it can take them.”

Nicolle Kelly, Queensland Small Business Commissioner, Queensland Government

For these digital natives, technology-enabled roles that combine creativity, social interaction, and skill development will make hospitality careers more appealing.

Small and medium-sized enterprises (SMEs) form the backbone of Queensland's service economy. Their employees will deliver much of the Games' hospitality offering but often face barriers to participation, including limited access to training, unclear procurement processes, and the high cost of visas or sponsorships for international hires. Many will need targeted support to meet Olympic standards and take advantage of the opportunity.

The Brisbane 2032 workforce also includes international talent. While overseas workers can fill crucial gaps, visa restrictions and sponsorship costs – sometimes exceeding \$80,000 – pose significant challenges for smaller operators. Balancing local development with targeted international recruitment will be vital and likely a key consideration for migration policy in the coming years.

Future leaders, those who transition from operational roles into management or design functions, represent another key group. Through exposure to Olympic-scale operations, they will gain valuable experience in coordination, quality assurance, and service design, forming the next generation of Queensland's industry leaders.

Supporting this diverse workforce will require more than training. It will demand accessible housing and transport, clear communication of career pathways, fair pay and working conditions, and inclusive access to contracts and tenders. These investments are not costs; they are enablers of a world-class service ecosystem. This will be a salient challenge given the current housing shortages in the Brisbane area as of 2025 (Real Estate Institute of Queensland, 2025).

Challenges

The path to 2032 is promising but not without obstacles. Labour shortages continue to strain Queensland's hospitality and food service sectors. Recruitment remains a critical issue, with declining interest in hospitality careers following COVID-19 and ongoing difficulties attracting skilled workers to regional areas. Many view hospitality as a stopgap rather than a profession, leaving key positions unfilled at both the top and bottom ends of the food system.

Visa restrictions exacerbate the issue. For SMEs, sponsoring skilled international workers can be cost-prohibitive and time-consuming, and worthwhile only for the most qualified candidates, who may be as difficult to find as local skilled staff. The larger pool of holiday visa workers means greater availability but also a lack of continuity, as workers often move based on employment but also personal or lifestyle reasons. Without intervention and planning, this gap risks constraining the industry's capacity to deliver Olympic-scale service.

Worker wellbeing presents another pressing challenge (Saito, et al., 2025). Hospitality roles can be physically demanding and emotionally taxing, especially during major events. Conditions vary widely, from freezer storage to high-pressure front-of-house environments, creating retention risks. Workload peaks, long shifts, and limited access to affordable housing or transport compound these pressures. As observed during the Commonwealth Games, the use of volunteers fostered community pride but also highlighted the need for better structured support for paid staff. From a family and community perspective, workforce pressures rarely stop at the workplace door. Irregular shifts, stress, low wages, and food insecurity can affect how households eat, sleep, and cope with daily life.

Brisbane 2032 offers an opportunity to acknowledge that workforce sustainability must extend beyond the end of a shift: initiatives that support access to nourishing food, flexible rostering where possible, and education around health and wellbeing can strengthen both on-the-job performance and resilience at home.

Technology offers part of the solution. Digital scheduling, demand forecasting, and QR-based service models can reduce stress and improve efficiency. But these tools must complement, not replace, the human touch that defines service excellence. Quality is another challenge. Inconsistent service standards, gaps in health and safety certification, and uneven

customer experience can undermine Queensland's reputation during a global event. Upskilling and formal certification will be crucial to standardising quality across venues and regions. The goal is not only to meet Olympic expectations but to elevate industry benchmarks for the long term.

Finally, coordination remains a major barrier. Many businesses struggle to navigate procurement systems or connect with Olympic opportunities. Tendering processes can be opaque, and collaboration across sectors, such as between growers, distributors, and caterers, remains limited. While “coopetition” (collaboration among competitors) has shown promise (Jooss et al., 2023), it often fades after events conclude. Sustaining such partnerships will require structured frameworks and ongoing support.

These challenges are real but surmountable. They underscore the need for proactive, strategic workforce planning that integrates recruitment, wellbeing, quality, and coordination into a unified approach.

Opportunities

Amid these challenges lies an extraordinary opportunity to redefine Queensland's service sector. The lead-up to 2032 allows for deliberate, phased investment in skills, infrastructure, and culture. “Keep the talent in Queensland and maintain that momentum and legacy after the Games,” urges Agnes Pennay from Fresh Meats, a Queensland-based retail and wholesale food service provider. Achieving this will

mean treating the Games not as a one-off event but as a catalyst for sector-wide renewal and long-term investment into the labour force.

“We cannot only train the workforce for the Games — we have to attract it. That means showing younger generations that hospitality is exciting, meaningful and full of opportunity. Whether that is through schools, social media, or more creative engagement, this is our chance to position hospitality as a long-term career, not just a short-term job for 2032.”

Natalie Bolt, COO and Co-Owner, The Table Food Consultants

Building a future-ready workforce

Brisbane 2032 can help reframe hospitality as a skilled, purposeful career. Through structured workforce strategies spanning low-, medium-, and high-skilled roles, Queensland can demonstrate how service work contributes to economic and social value. Showcasing career pathways, from front-of-house to quality assurance or service design, will help attract new entrants and retain experienced professionals.

Gamification and digital engagement tools can modernise training and capture the imagination of younger workers (Eger et al., 2025). A future-ready workforce strategy should also connect explicitly with children and education systems – from school food programs and nutrition education to hospitality pathways in secondary and tertiary curricula, and visible career stories in the community.

Brisbane 2032 can be a platform to inspire the workforce of 2040 and beyond by framing hospitality as a respected, skilled profession rather than a fallback job, starting with how young people encounter food, service work, and career possibilities in schools and families.

Upskilling and certification

The Games can also serve as a springboard for “professionalisation” (Cheng & Wong, 2015). By expanding certification and safety programs, Queensland can ensure consistent

standards across all participating venues. The “Be My Guest” program from the Commonwealth Games provides a successful model for delivering short, accessible training directly to businesses. A certified workforce will not only enhance Olympic delivery but also strengthen the state’s long-term capability and global competitiveness. There is also growing recognition of the role of dietitians in food service operations, supporting nutrition standards, food safety, menu design, and workforce wellbeing. Partnerships between universities, schools, and hospitality

Pictured (left to right): Natalie Bolt, Justin Nugent, Associate Professor Stefan Jooss, Cara Aprile, Agnes Pennay



providers can expose dietetic students to these pathways and strengthen links between health literacy, practical food skills, and service careers, broadening the talent pipeline into food service leadership roles.

Empowering small and medium-sized enterprises

SMEs stand to benefit enormously if given equal access and the right support vis-à-vis national or international suppliers that may be prioritised. Reciprocally, Queensland also reaps the benefits of a robust state economy, fuelled by the active participation of Queensland-based businesses and their visible international exposure on the global Olympic stage. Simplified tendering processes, accessible marketing resources, and guidance on compliance can make participation feasible. Encouraging co-competition – collaborative partnerships between local competitors – can allow smaller operators to deliver at Olympic scale. This might see organisations co-attract, co-develop, and co-retain talent in Brisbane and the region (Jooss et al., 2023). The Games should serve as an incubator for new business models that blend competition with cooperation, building resilience across Queensland's service network.

At the same time, many of the smallest operators face distinct training inequities: micro-businesses often lack HR support, formal training budgets, and spare time away from the shop floor. Flexible solutions such as mobile training units, short on-site education bursts, digital toolkits

covering food safety, allergen management, nutrition standards, and staff wellbeing, and peer-led models where businesses learn from each other can make Olympic-related training realistic rather than aspirational for local operators.

Strategic infrastructure development

Workforce readiness also depends on the right infrastructure. Affordable housing, efficient transport, and regional mobility are prerequisites for participation. Investments made for the Games, whether in transport corridors or training facilities, must be designed for post-event use, supporting long-term regional development and labour mobility.

Technology integration

Digital tools will be indispensable. From predictive staffing models to real-time feedback systems, technology can help optimise resources, anticipate demand, and enhance customer experience. However, the goal should be augmentation, not automation. Technology should empower workers, not displace them, giving them the information and flexibility needed to deliver exceptional service.

Sustainability and legacy

Finally, workforce planning must align with the sustainability ethos of Brisbane 2032. This means social as well as environmental sustainability, embedding fairness, inclusivity, and wellbeing into every stage of

workforce design. A sustainable workforce is one that feels valued, supported, and able to grow. The true legacy of the Games will not be measured by medals or visitor numbers but by the strength of the workforce left behind.

Pictured (left to right): Nicolle Kelly, Professor David Solnet, Natalie Bolt



Recommendations for policy and practice

Following reflection on the challenges and opportunities, we provide five recommendations.

1. **Launch targeted training initiatives with businesses.** In the short term, Queensland should launch targeted training initiatives that reach businesses directly. Programs modelled on Be My Guest can rapidly build skills and confidence across the service sector. Small businesses will need tailored resource packs with practical guidance on health, safety, and customer service standards, enabling them to compete for the Games contracts. Simplifying procurement pathways and clarifying visa and labour requirements will reduce administrative barriers.

2. **Implement technology to improve efficiency.** Implementing digital ordering and predictive modelling systems can help manage peak demand and reduce stress on frontline staff. Engaging reputable labour-hire agencies for short-term event staffing will ensure flexibility without undermining local employment.

3. **Develop a staged workforce plan for skill and capability development.** Over the longer term, Queensland should develop a staged workforce plan that nurtures capability across all skill levels. Certification schemes should be embedded to raise standards and ensure that investments translate into enduring benefits. Reframing hospitality as a career of choice, with visible pathways into higher-skill and management roles, will strengthen retention.

4. **Invest in infrastructure to support service workers.** Infrastructure investment in housing, transport, and regional connectivity will further support workforce participation.

5. **Ensure equitable and fair working conditions.** Equally important is fostering a culture of fairness, wellbeing, and sustainability. Workforce policy should guarantee equitable wages and safe working conditions across all roles, from back-of-house to customer-facing.

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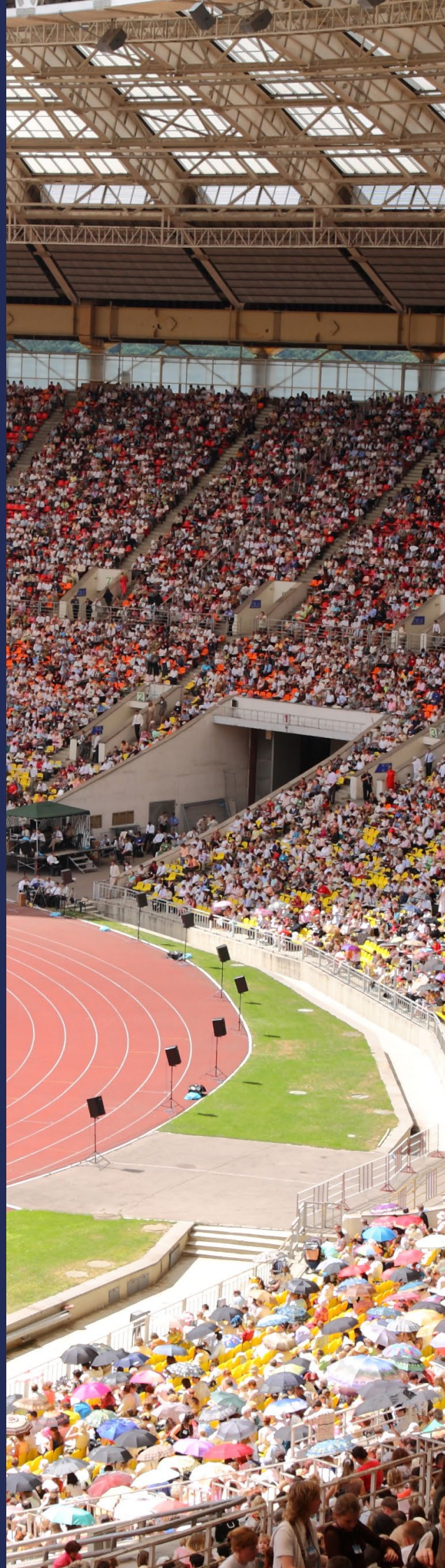
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Pictured: Agnes Pennay



Chapter 4

Athletes as consumers



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Introduction

Food provision at major sporting events has traditionally been treated as a logistical and operational challenge rather than a core element of athlete performance, wellbeing, and experience (Pelly & Simmons, 2019). Yet for athletes living, training, and competing within the highly controlled environments of Olympic and Paralympic Games, food is not simply sustenance. It is performance infrastructure, a source of physical and psychological security, a means of social connection, and a key determinant of trust in the event environment. How food is designed, delivered, and governed has a direct bearing on athlete readiness, recovery, health, and ultimately competitive outcomes. Optimal nutrition supports muscle repair, glycogen restoration, and immune function—key determinants of physical readiness and competitive performance in elite sport (Amawi et al., 2024; Heaton et al., 2017). Moreover, expert reviews of food provision at major events emphasise that menus and provisioning must meet performance, dietary, and cultural needs to avoid undermining athlete health and preparation (Pelly et al., 2025).

This perspective is well supported in the literature. Reviews of nutrition and food provision at the Games underscore that food services must be understood as integral to performance preparation, competition readiness, and overall athlete wellbeing, rather than as a peripheral catering function (Pelly & Tweedie, 2022). Importantly, this work highlights that athlete engagement with food is shaped not only by nutritional composition, but also by broader environmental factors such as accessibility, familiarity, cultural relevance, and perceived food safety. When these factors are misaligned, athletes may reduce intake, restrict food choices, or disengage from communal dining environments, with potential consequences for both performance and health (Pelly & Tweedie, 2021).

This White Paper adopts the framing of athletes as consumers, recognising that athletes are not a homogeneous group with uniform needs, preferences, or expectations. Rather, they are diverse individuals whose experiences are shaped by sport-specific performance demands, cultural and religious practices, disability status, competition schedules, and habitual routines

developed over years of training. Research on professional athletes' responses to innovation highlights that athletes actively interpret, negotiate, and respond to changes in the systems that shape their performance environments, rather than passively accepting them (Fujak et al., 2023). This perspective underscores the importance of treating athletes as discerning stakeholders whose trust, familiarity, and lived experience influence how systems function in practice.

This diversity is also increasing. The cohort of athletes expected to compete at the Brisbane 2032 Olympic and Paralympic Games will include members of Generation Alpha, whose expectations around convenience, personalisation, transparency, and trust are likely to differ from those of previous generations. At the same time, the Paralympic Games continue to grow in scale, visibility, and complexity, with a corresponding expansion in the range of dietary, accessibility, and medically informed nutrition needs that must be accommodated. Together, these shifts reinforce the need to view food provision not merely as a logistical service, but as a consumer-facing system in which athlete perceptions, preferences, and confidence play a critical role in shaping outcomes.

Despite the centrality of food to athlete experience and performance, there remains a notable lack of high-quality, integrated research on food provision at major sporting events. While existing studies document menu composition, nutritional intake, and

selected athlete perspectives, the evidence base is often descriptive, fragmented across disciplines, and insufficiently connected to the operational realities of Games delivery (Pelly & Tweedie, 2021). As a result, organising committees frequently rely on inherited catering models, contractual templates, and assumptions that may no longer be fit for purpose in contemporary Olympic and Paralympic contexts.

This gap is further underscored by a recent meta-narrative review of food provision at Olympic and Paralympic Games over the past two decades. That review identified food safety, sustainability, athlete perspectives, and the broader food environment as recurring and persistent themes across Games cycles, while also highlighting the limited empirical attention paid to Paralympic food systems (Pelly et al., 2023). Taken together, this body of evidence suggests that many of the challenges faced by recent host cities are neither novel nor isolated, but systemic issues that have persisted across multiple Games cycles with limited institutional learning.

Recent Games have brought these tensions into sharper focus. Paris 2024, for example, articulated an ambitious food vision grounded in sustainability and environmental responsibility (IOC, 2023). While laudable in intent, the operationalisation of this vision revealed tensions between environmental objectives and athlete needs, particularly in relation to food availability, quality, and trust. Conversely, targeted innovations implemented by individual national teams—most notably Australia's café-

based approach—demonstrated how athlete-centred food environments can support performance, reduce illness, and enhance social connection, albeit at a scale that is not easily replicated for all delegations.

Looking ahead to Brisbane 2032, the challenge is not simply to refine menus or redesign dining halls, but to reconceptualise food provision as a system-level issue that spans villages and venues, Olympic and Paralympic Games, performance and security, innovation and risk management, and cultural representation. This chapter synthesises insights from expert discussion (and the broader literature) to identify the key challenges facing athlete food provision at major sporting events, highlights opportunities for improvement, and proposes actionable recommendations for policy and practice. Central to this analysis is the proposition that if food provision is designed to meet the needs of Paralympic athletes, it will almost certainly meet—and exceed—the needs of Olympic athletes.

Challenges

Athlete centred design and food environment

A persistent challenge in food provision at major sporting events is the misalignment between athlete needs and food environments designed primarily for scale, efficiency, and risk management. Olympic and Paralympic food systems have historically been organised around the logistics of feeding large

populations within constrained timeframes and highly regulated environments. While this approach is necessary from an operational perspective, roundtable participants noted that it often struggles to accommodate the increasingly individualised dietary practices of elite athletes, whose nutritional needs vary by sport, training load, competition schedule, cultural background, and habitual eating routines. Expert evaluation of food provision at the Tokyo 2020 Olympic and Paralympic Games similarly found that large-scale catering models performed unevenly across locations, with satellite and venue-based food provision rated less favourably for performance suitability and dietary specificity than the main dining hall (Pelly et al., 2025).

“If we don’t put athletes at the centre, 2032 won’t be successful.”

Professor Fiona Pelly, Discipline Lead, Nutrition and Dietetics, School of Health, University of the Sunshine Coast

Research on food provision at the Olympic Games reinforces that athlete interaction with food is shaped not only by nutritional adequacy, but by the broader food environment, including accessibility, familiarity, cultural relevance, and perceived food safety (Pelly & Tweedie, 2021). Reflecting this, when food environments fail to support these dimensions, athletes frequently respond by restricting food choices, avoiding communal dining spaces, or relying on team-controlled food provision—particularly during

competition periods when tolerance for uncertainty is low. Findings from sports dietitians evaluating Tokyo 2020 support this observation, noting that food provision outside the main dining hall was less consistently aligned with performance and dietary needs, potentially prompting athletes to seek alternative food strategies (Pelly et al., 2025).

Despite repeated Games cycles, these challenges have proven remarkably persistent. A meta-narrative review of food provision at Olympic and Paralympic Games over the past two decades identified athlete perspectives, food safety, sustainability, and the food environment as recurring themes, suggesting limited institutional learning across host cities (Pelly et al., 2023).

Roundtable participants echoed this conclusion, noting that many of the same issues re-emerge across Games despite changes in hosts and catering partners, reflecting structural constraints within Games governance and limited mechanisms for knowledge transfer. The expert review of Tokyo 2020 further illustrates this pattern, with discrepancies observed between planned food provision and on-site implementation, as well as limited flexibility to adapt menus during the event (Pelly et al., 2025).

Trust in the food environment emerged as a central concern in the discussion. Trust is built through familiarity, consistency, and confidence in food safety and preparation practices, and that once compromised it is difficult to restore within the compressed timeframe

of a major event. This practitioner insight aligns with existing literature identifying food safety and hygiene as enduring concerns in Olympic food provision, given athletes' heightened sensitivity to any perceived risk of illness during competition (Pelly & Tweedie, 2021; Pelly et al., 2023). Expert reviewers have similarly highlighted the importance of consistency and reliability in food provision across Games settings to support athlete confidence (Pelly et al., 2025).

These challenges are further amplified by the increasing diversity of athlete populations. Roundtable participants highlighted those cultural and religious dietary requirements, as well as strong preferences for habitual foods developed in home training environments, are not easily accommodated within standardised dining hall models. Consistent with this observation, research indicates that athletes often prioritise familiar foods in the lead-up to and during competition, particularly when performance stakes are high (Pelly & Tweedie, 2021). Expert evaluation of Olympic and Paralympic food provision has likewise identified cultural representation and menu variety as ongoing areas for improvement, even when basic nutritional and safety requirements are met (Pelly et al., 2025).

Taken together, this suggests that athlete-centred food provision is not primarily a matter of menu variety, but of environmental and system-level alignment. Without deliberate attention to how food environments are experienced by athletes, large-

scale catering models risk prioritising operational convenience over performance support—a tension repeatedly observed across recent Olympic and Paralympic Games (Pelly et al., 2023; Pelly et al., 2025).

Lessons from Paris 2024: sustainability versus operational reality

Paris 2024 provides a salient case study of the risks associated with misalignment between vision and execution. The Games' food strategy (or "Food Vision") emphasised sustainability, including reductions in single-use plastics and a greater emphasis on plant-based options. Operational and regulatory constraints limited flexibility during Paris 2024, including challenges associated with vending machine refilling and the management of beverage refill stations under strict hygiene and regulatory requirements.

Paris 2024 pursued a sustainability-oriented food strategy that emphasised local and seasonal sourcing alongside a greater share of plant-based options in its overall menu design. However, athletes and national delegations raised concerns about the availability and quality of protein-rich foods early in the Olympic Village period. Some competitors reported that egg and meat options — key sources of animal protein relied upon in many elite nutrition plans — were initially insufficient to meet demand (Shen, 2024). In response to these concerns, the Games' catering partner increased volumes of popular animal protein items such as eggs and grilled meats to better align food provision with athlete needs.

Criticism from some teams extended beyond quantity to the overall food experience. Several national squads described the food situation as a "disaster," with reports that limited protein availability and inconsistent food quality prompted at least one team to bring in a private chef to supplement the Olympic Village offerings. These accounts reflect significant athlete dissatisfaction with how food services were meeting competition-period nutritional demands (Ronk, 2024).

A critical insight from Paris is that sustainability initiatives cannot be imposed without athlete engagement and education. Athletes must be brought along the journey well in advance, with clear communication about changes, alternatives, and the rationale behind them. Absent this engagement, even well-intentioned policies risk being perceived as barriers to performance rather than contributions to broader social goals.

Fragmented governance and contractual inertia

Food provision at the Brisbane 2032 Games sits at the intersection of multiple governance structures, including the International Olympic Committee, local organising committees, national governments, venue operators, and commercial sponsors. Each Games cycle introduces a new organising committee and often new catering partners, making continuity of learning and institutional memory difficult to sustain. This concern is consistent with evidence that key themes in Games food provision—including athlete

perspectives, food safety, and the food environment—recur across cycles, suggesting limited institutional learning and weak mechanisms for systematic knowledge transfer (Pelly et al., 2023).

Contracts for food provision are typically finalised years in advance, driven by procurement processes, commercial arrangements, and regulatory requirements. While early contracting is necessary to ensure scale, compliance, and cost certainty, it is important to note that once contracts are in place they are notoriously difficult to amend, even in the face of emerging evidence, athlete feedback, or operational challenges identified during the Games period. Expert evaluation of food provision at the Tokyo 2020 Olympic and Paralympic Games reinforces this point, reporting discrepancies between planned provision and on-site implementation and noting limited flexibility to modify menus during the event (Pelly et al., 2025). More broadly, reviews of Olympic food provision emphasise that effective delivery requires alignment between planning, implementation, and the lived athlete experience—an alignment that can be difficult to achieve in temporary, high-complexity event environments (Pelly & Tweedie, 2021).

Fragmentation is particularly evident across venues. While athlete village catering is often managed by a dedicated Games caterer with experience in servicing high-performance environments, competition venues frequently rely on existing suppliers whose primary

expertise lies in servicing spectators rather than elite athletes. Such venue-based arrangements are often governed by separate contracts and operational logics, creating inconsistencies in food quality, availability, and suitability across locations. Supporting this, sports dietitians evaluating Tokyo 2020 rated food provision outside the main dining hall—including satellite and venue-based provision—less favourably for performance suitability and dietary specificity, highlighting the challenges of delivering consistency across decentralised food environments (Pelly et al., 2025).

As a consequence, food provision at competition venues is frequently treated as a secondary consideration, despite its critical role in pre- and post-competition routines for many sports. For athletes competing multiple times in a day, or in events requiring precise fuelling and recovery strategies, inadequate or poorly timed venue food provision can disrupt performance preparation and recovery. Governance and contracting models materially shape whether the Games food systems prioritise administrative and contractual certainty over athlete-centred responsiveness (Pelly et al., 2023; Pelly et al., 2025).

Infrastructure, logistics, and equity

The Olympic and Paralympic “bubble(s)” creates significant constraints on food access and innovation (Duignan et al., 2022). Movement between villages, competition venues, and external facilities is tightly controlled for

security and operational reasons, limiting the feasibility of offsite solutions such as specialist recovery centres, team-based dining hubs, or bespoke nutrition services. While these controls are necessary for the Games delivery, it is important to note that they can inadvertently restrict flexibility and responsiveness in food provision, particularly for athletes with complex or sport-specific needs.

Housing arrangements were also identified as a source of inequity. The roundtable participants observed that some delegations are able to access superior food environments through institutional partnerships or proximity to external facilities, while others rely entirely on standard village offerings. These disparities are not necessarily intentional, but they can result in uneven athlete experiences and perceived competitive imbalances, particularly when access to familiar foods, recovery nutrition, or culturally appropriate options differs across teams.

The challenge is magnified for Games hosted across multiple cities or regions. Ensuring consistency in food quality, availability, and suitability across dispersed venues is inherently difficult, yet essential to maintaining fairness. Athletes competing in satellite locations must not be disadvantaged by inferior provisioning relative to those based in primary villages. Achieving parity, however, requires early and coordinated planning across jurisdictions, venue operators, and catering providers—something that is often underestimated in Games planning timelines.

Taken together, these infrastructure and logistics constraints highlight the equity implications of food provision decisions. Without deliberate, system-wide coordination, differences in geography, housing, and access risk translate into unequal food environments, undermining the principle that all athletes should have access to comparable conditions of preparation and recovery regardless of where they are accommodated or compete.

Food safety, security, and emerging threats

Food safety was identified as a non-negotiable priority at major sporting events. The scale of operations necessitates separate contractors, strict controls on food movement, and ongoing monitoring, including wastewater analysis. These measures were described as essential to minimise the risk of foodborne illness in environments where even minor disruptions can have significant performance consequences.

Further, food systems are increasingly recognised as potential security vulnerabilities. As cyber security measures improve, malicious actors may seek alternative points of disruption, including supply chains and food preparation environments, adding further complexity to food governance at the Games.

Paralympics as a stress test for the system

The Paralympic Games expose the limitations of one-size-fits-all food systems. Para-athletes encompass a

wide spectrum of needs, from those requiring minimal accommodation to those with high-support requirements, including assistance with eating, specialised diets, blended foods, and accessible infrastructure. Dining hall layouts, packaging design, and service models must account for wheelchairs, prosthetics, and support personnel.

“Plan for the Paralympics, and if you do that right, you cater for the Olympics.”

Dr Gary Slater, National Performance Nutrition Network Lead, Australian Institute of Sport

Expert evaluation of food provision at the Olympic and Paralympic Games supports this observation, noting that standard catering models often struggle to meet the diverse and complex needs of Paralympic athletes across different settings (Pelly et al., 2025).

Critically, these needs are not static; advances in assistive technology and evolving classification systems may significantly alter requirements by 2032. Reviews of food provision at Paralympic Games similarly highlight the importance of adaptable systems capable of responding to changing athlete profiles and support needs over time, rather than relying on fixed assumptions established early in the planning cycle (Pelly & Tweedie, 2021; Pelly et al., 2023).

Opportunities

Reframing food as performance infrastructure

A key opportunity lies in reframing food provision as core performance infrastructure rather than hospitality. This shift encourages earlier integration of athlete voices, sports nutrition expertise, and operational planning, and helps legitimise investment in flexibility, redundancy, and quality. Framing food provision in this way is consistent with existing research that positions Games food environments as integral to athlete preparation, recovery, and wellbeing, rather than as a peripheral logistical function (Pelly & Tweedie, 2021), and recognises that the costs of inadequate food systems may manifest as illness, underperformance, or reputational damage to the Games.

Lessons from Australian innovations

Australian team practices offer valuable insights, particularly the use of cafés, grab-and-go stations, and strategically placed food items to encourage consumption. These environments provided opportunity for familiar foods, high-quality beverages, and spaces for social interaction, reducing reliance on central dining halls.

During Tokyo, where athletes were encouraged to eat in their rooms due to COVID-19 protocols, there was a marked reduction in illness, reinforcing the perceived link between food environments, exposure risk, and health outcomes.

While such models may not be scalable for all delegations, their underlying principles—familiarity, convenience, trust, and flexibility—remain transferable and can inform broader food system design at the Games level.

Digital enablement and information transparency

Technology offers significant potential to improve athlete experience without enforcing dietary compliance. Mobile-friendly platforms could provide real-time information on menus, allergens, queue lengths, and venue occupancy, enabling athletes to plan meals around training and competition schedules. Integration with widely used platforms and operating systems was identified as essential to ensure accessibility across cultures and regions.

Importantly, digital tools should support awareness and choice rather than surveillance or “food policing,” respecting athlete autonomy while reducing uncertainty in the food environment.

Indigenous and local food as optional enhancement

Major sporting events have historically embraced distinctive food identities, creating opportunities to showcase local produce and culture. For Brisbane 2032, Indigenous Australian foods and Queensland produce offer a compelling opportunity, aligning with the Games stated commitment to recognising and showcasing First Nations culture as part of its legacy agenda (Brisbane 2032, Organising Committee, 2026).

Inclusion of Indigenous foods should prioritise athlete familiarity and choice. Indigenous ingredients are seen as most appropriate in snack formats or as optional enhancements, rather than embedded within core competition-period meals, allowing athletes to engage without disrupting established dietary routines.

Authenticity is identified as critical, stressing that partnerships with Indigenous businesses must be genuine, Indigenous-led, and commercially fair to avoid tokenism and ensure cultural integrity.

This approach aligns with broader Queensland Government initiatives that support Indigenous-owned native food enterprises and seek to expand market access for native ingredients (Queensland Government, 2023). Academic research similarly highlights that integrating Australian native foods can deliver cultural, environmental, and economic benefits when Aboriginal knowledge and governance are central to design and implementation (Lopes et al., 2025). Together, these insights suggest that Indigenous food innovation at Brisbane 2032 should be positioned as an optional, culturally grounded, and legacy-oriented component of the Games' food system, rather than a compulsory element of athlete dining.

Universities as neutral brokers and innovators

Universities are identified to act as trusted, neutral brokers, bringing together research, industry, athletes, and Games organisers. Their

involvement can support evidence-informed decision-making, enable pilot testing of innovations well ahead of Games timeframes, and provide continuity across Games cycles that is often lacking within temporary organising committees. Discussion also emphasised that universities could help balance innovation with risk management, ensuring that new products, technologies, or systems are sufficiently mature before deployment in high-stakes competition environments.

Designing for Paralympics first

Adopting the principle of “designing for the Paralympics first” offers a powerful organising framework. Systems capable of meeting the diverse needs of Paralympic athletes—across accessibility, individualisation, and medical–nutrition integration—are likely to exceed the requirements of Olympic athletes, creating a more inclusive and resilient food environment for all.

Pictured (left to right): Dr Gary Slater, Professor Fiona Pelly, Dr Jessica Cartwright, Dr Brooke Devlin, Susan Porchun, Professor Jason Stokes



Recommendations for policy and practice

Following reflection on the challenges and opportunities, we provide eight recommendations.

1. **Embed athlete engagement early.** Establish structured mechanisms for athlete and practitioner input during the planning phase, well before contracts are finalised. Move beyond post-Games surveys by creating feedback processes that can inform design and implementation decisions upstream.
2. **Integrate Paralympic standards from the outset.** Use Paralympic requirements as the baseline for food system design, rather than retrofitting accommodations later. Design dining environments, packaging, and service models to accommodate a wide spectrum of physical, sensory, and medical–nutrition needs. Evidence from expert evaluations indicates that standard catering models often struggle to meet the diverse needs of Paralympic athletes, particularly across different settings.
3. **Align contracts with performance and flexibility goals.** Include explicit provisions for adaptability, feedback integration, and quality standards in catering contracts. Avoid rigid specifications that limit the ability to adjust menus or service models during the Games period. Expert review of Tokyo 2020 identified limited flexibility to modify food provision once contracts were in place, reinforcing the need for adaptable contracting frameworks.
4. **Coordinate village and venue food governance.** Treat food provision as a system spanning all athlete environments, including villages, venues, and training sites. Establish governance arrangements that ensure consistency in food quality and suitability across locations. Evaluations of Olympic and Paralympic Games food provision have highlighted poorer performance suitability at venues compared with main dining halls, underscoring the risks of fragmented governance.
5. **Invest in digital information systems.** Develop athlete-facing platforms that provide real-time information on menus, allergens, queue lengths, and venue occupancy. Integrate systems with widely used operating platforms to ensure accessibility across cultures and regions. Ensure digital tools support awareness and choice rather than surveillance or dietary enforcement.
6. **Strengthen food safety and security frameworks.** Maintain food safety as a non-negotiable priority, with robust oversight across suppliers, venues, and distribution points. Reviews of food provision at the Games consistently identify food safety and hygiene as enduring concerns, given athletes' heightened sensitivity to illness risk during competition. Incorporate food systems into broader Games security planning, including supply chain resilience and contamination risks.

7. Leverage universities as convenors and knowledge brokers. Engage universities as neutral partners to convene research expertise, industry, athletes, and organisers. Use academic partnerships to support research, independent evaluation, and pilot testing well ahead of Games timeframes. Draw on university continuity to preserve learning across Games cycles, addressing gaps in institutional memory identified in previous reviews.

8. Plan innovation timelines carefully. Introduce new products, technologies, or practices well ahead of competition periods to allow testing, refinement, and athlete familiarisation. Evidence from multiple Games cycles suggests that late-stage changes limit the ability to respond to athlete needs and contribute to recurring food provision issues. Avoid deploying unproven innovations close to major events, when tolerance for risk and uncertainty is low.

Pictured: Professor John Cairney

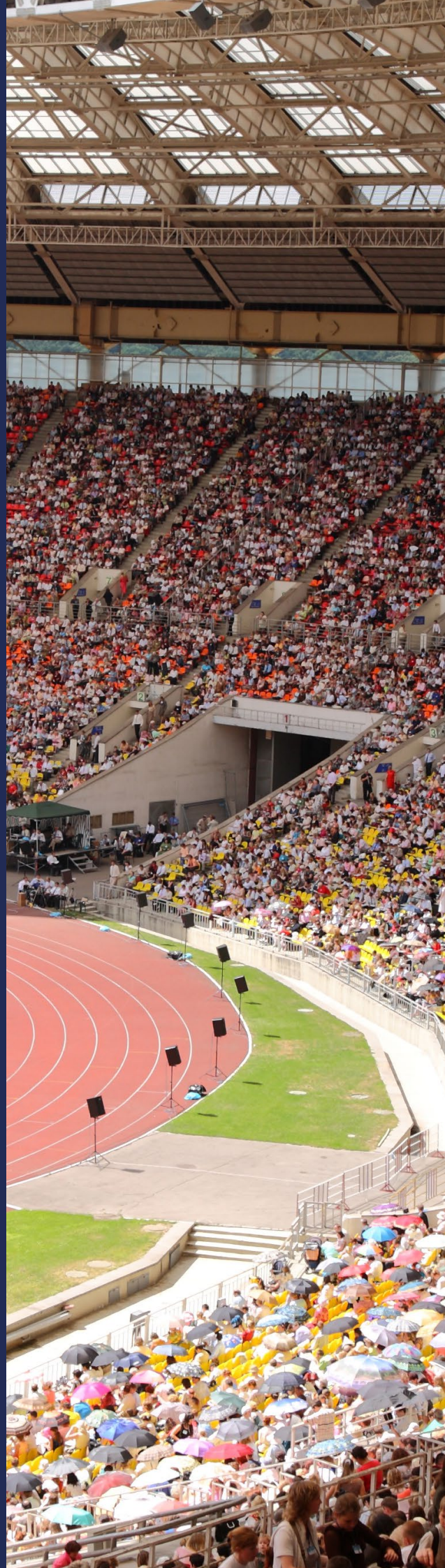


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Chapter 5

Tourists as consumers



Lead: Thomas Magor

Allison Bambrick, Chloe Budd, Chris Heydon, Tony Hunter, Anneline Padaychee, Stanislav Pozdniakov and Lisa Ruhanen

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Introduction

Brisbane 2032 is not just a series of sporting events, but events that will host over a hundred thousand international and interstate visitors. The Brisbane 2032 Games presents a once-in-a-generation opportunity to reimagine how tourists consume food and beverage experiences across Southeast Queensland (SEQ).

Tourists seek information, evaluating risks, and wanting to hear stories attached to the food/cuisines they consume. A key challenge is creating value for these consumers, as well as cocreating value with these consumers in place-based hospitality settings. The Games are expected to bring 110,000 tourists to Brisbane (McCarthy, 2019).

In terms of the scale of the event, we can look to the most recent Games in Paris 2024. On a single day at those games, over 700,000 spectators attended events as in-person spectators (IOC, 2024). While Brisbane differs geographically in many ways to Paris, similar participation levels are anticipated for 2032. Rising to the challenge of feeding such a large influx of visitors will require significant amounts forward-thinking planning that not only focuses on the scale of

operations but also anticipates and integrates emerging technologies to deliver seamless, safe, and memorable food experiences.

By 2032, visitors to Brisbane are expected to be consumers whose choices are increasingly based on technology-mediated discovery (i.e., guided more by AI and recommendation algorithms and less by marketing/advertising or human-level word of mouth). They are expected to value trust in provenance and ethical supply chains and will exhibit highly diverse preferences ranging from demand for premium high-end showcases though to classic cheap and cheerful icons that capture their imagination of what it means to be “Australian.”

“Visitors will come expecting modern, seamless experiences of ‘Australian food.’ That means we should design services and menus that feel current: smart ordering, clear information, and stories that match the real Brisbane scene, while providing what today’s travellers value most: quality, relevance, personalised where possible, and a sense of place.”

Tony Hunter, Food Futurist

To feed the visitors to the Brisbane 2032 Games, orchestrating collaboratively links between government, industry and academe to set standards for traceability and ethical practice, are required investing in innovation that enhances both human hospitality and digitally mediated information discovery. Three main contextual realities emerged from our table discussion to frame the task of feeding consumers at the Games.

First, domestic visitors are expected to comprise the majority of attendees to the Games, but in terms of spending we expect international visitors to contribute an outsized proportion. The food offerings portfolio should be designed to serve both segments. Recent national data show domestic overnight trips reached 115 million with A\$110.3 billion in spend (year ending Dec 2024), while international consumption rebounded strongly and lifted tourism GDP and jobs (TRA, 2024).

Second, Australia's stringent biosecurity controls shape visitor expectations about food import restrictions and reinforce a national positioning around food safety. Further, global evidence indicates rising consumer demand for transparency and traceability regarding the entire chain of logistics associated with food production (including both ingredient provenance and labour practices). Consumers have a higher willingness-to-pay for offerings they can trust and that emphasise ethicality in all areas of their production, especially in premium categories but also in basic nutrition (Tran et al., 2024).

Third, the cohort of consumers of GLP-1 medications (e.g., Ozempic, Wegovy, and Zepbound) is expanding which has been demonstrated as shifting consumption patterns toward smaller portions, higher satiety, and lower sugar, a structural demand trend that merits explicit menu and product responses. This shift is already influencing food and beverage portfolios globally, with significant declines in highly processed, calorie-dense categories and increased interest in protein-forward options (Hristakeva et al., 2024; Monaco, 2025).

The chapter proceeds by outlining Challenges, Opportunities, and Recommendations for policy and practice, concluding with implications for legacy and resilience.

Challenges

Despite the advance of AI and robot technology, the food service industry faces several critical issues that make implementation difficult. Each of these factors presents unique challenges and requires innovative solutions to ensure the sustainability and growth of the industry.

Tech-shaped discovery and service expectations

In 2032, tourists will rely heavily on not just digital platforms to seek information but will be using generative AI for every part of their food journey from discovery and itinerary planning through to food safety checks and provenance verification. It is also expected that technologies which are currently

in their infancy (augmented reality through wearable technologies, specifically smart glasses) will be commonplace.

This will reduce the reliance on ad hoc human information sources and raises baseline expectations for on-demand personalisation, queue transparency, and content-rich storytelling via digital media. The strategy of mobilising and relying heavily on a “volunteer army” for Sydney 2000 Olympics has been credited for much of the success of those games (Fairley et al., 2016). However given the above outlined changes in technology and expectations for digitally mediated sources of information, it cannot be assumed that the same strategy would work for Brisbane 2032.

As a result, the labour shortage during the pandemic has hastened

the industry's adoption of service robots. This shift has led customers to embrace - whether forcefully or voluntarily - the transformation of traditional services brought by the service robots (Lucas, 2023). Customers are accustomed to mobile apps or self-service kiosks to place orders and service robots delivering their orders to the table (Baba et al., 2023). Dr Thomas Magor, Business School, The University of Queensland, notes that “by 2032, many visitors will ask a digital assistant first and a person second. Our volunteering should reflect that: friendly human hosts supported by simple digital tools for wayfinding, queue times, allergens, and provenance. This ‘human + digital’ approach keeps the warmth of local hospitality while meeting expectations for quick, reliable information”.

Pictured (from left to right): Tony Hunter, Allison Bambrick, Professor Lisa Ruhanen, Dr Thomas Magor, Dr Stanislav Pozdniakov



In tourism contexts broadly, AR/VR adoption has been shown to be increasingly used for pre-experience and on-site augmentation, but deployments currently remain uneven and often pilot-scale (Yung & Khoo-Lattimore, 2019). In food service settings the sector must guard against tech for tech's sake and ensure accessible, inclusive design is at the forefront of how the service-scapes (Bitner, 1992) specific to the Brisbane 2032 Games are designed. Brisbane's hospitality scene is vibrant yet comparatively capacity-constrained if compared to other larger global cities. As such, raising the challenge of increasing this capacity to serve the massive influx of tourists expected to visit Brisbane during period of the Games will present as a major challenge. Excessive wait times for food service within these service-scapes threaten to be a major source of dissatisfaction, underscoring the need for intelligent queue management systems, digital ordering, and operational throughput improvements.

Whilst queuing norms vary globally, effective management strategies such as clear wait-time communication and mindset framing are critical in tourism settings to maintain orderly behaviour and reduce reneging (Baek et al., 2025). However, during the context of the Games, we must expect a highly diverse visitor cohort that will in some cases have different expectations and different tolerances, requiring clear signage, time transparency, and potentially virtual queuing systems.

The aforementioned digital technologies are being increasingly embedded into marketing platforms (Plangger et al., 2022). Such technologies are already providing reliable forecasts and predictions of the availability of alternatives and estimated wait times.

By 2032, it is expected that the sophistication of these algorithms to have grown to be capable of delivering even greater accuracy than current methods.

“Brisbane’s hospitality footprint, particularly around key precincts, will face unprecedented compression during the Games. Beyond digital queuing systems, physical food access infrastructure must be considered: satellite meal-pickup points, modular food stations, and micro-markets positioned along major pedestrian corridors. These distributed assets reduce congestion at restaurant clusters and create predictable food access opportunities for visitors moving between venues.”

Chris Heydon, Director, Lilly’s Little Lunchbox

Ethical assurance, labour supply and food safety in Queensland's labour hire is subject to a specific regulatory scheme, although the existence of such schemes is patchy across state jurisdictions in Australia (Cockayne et al., 2024). The Fair work Ombudsman's horticulture compliance report (Fair Work Ombudsman, 2025) found Queensland had the lowest rates of non-compliance with workplace relations laws (i.e., those relating to piecework rates, record-keeping, sourcing labour through

labour hire providers, hours of work and overtime, and deductions for accommodation, transport and job finding). This implies that for Queensland-sourced ingredients, this creates a strategic opportunity to highlight the high rates of ethical sourcing and labour compliance as a point of differentiation. For interstate ingredients, stronger supplier vetting processes are recommended.

Australia's agriculture and food supply chain faces significant labour shortages. Currently, the workforce is estimated at 172,000 workers from paddock to plate, which is considered insufficient to meet production capacity demands, ensure logistics reliability, and to keep food prices at sustainable levels (National Farmers' Federation, 2023). These shortages affect farmers, processors, distributors, and transport operators, creating systemic risks to volume and supply chain resilience.

Visa reforms and workforce programs (including labour hire regulation) may help ensure a reliable labour supply for hospitality and tourism sectors during the Brisbane 2032 Games by streamlining access to temporary skilled and seasonal workers, reducing administrative barriers, and promoting fair employment practices. These measures can support hotels, restaurants, and event venues in meeting the surge in demand, maintain service quality, and prevent workforce shortages that could impact visitor experience and economic outcomes.

Consumers show strong demand for transparent information about the

products they consume, particularly in contexts involving risk and contexts of high personal relevance (Sansome et al., 2025). Food consumption inherently involves risk and consumers are increasingly expecting detailed information about not just the provenance of ingredients, but also the human labour utilised to produce their food at every stage of the supply line (Pozelli Sabio & Spers, 2022).

Consumers are also concerned about sustainability in hospitality, seeking out venues that demonstrate ethical sourcing, waste reduction, and energy efficiency (Hitchings, 2025). Sustainable cafés and restaurants are increasingly expected to go beyond token gestures, incorporating practices such as sourcing local and seasonal produce, minimising single use plastics, implementing energy efficient equipment, and reducing food waste through composting or donation programs. For Brisbane 2032, these expectations are particularly relevant as international visitors will scrutinise the city's hospitality offerings for alignment with global sustainability standards. Meeting these expectations not only enhances brand reputation but also aligns with broader environmental and social goals associated with hosting a major global event.

The need for stronger compliance, transparent reporting and ensuring sustainability goals are demonstrated at venues is indeed a challenge. However, given the strong position Queensland has in this area already, it should also be viewed as an opportunity to champion ethical practice and to align with the Olympics charter (IOC, 2025).

Foodborne illness remains a global challenge, and incidents can rapidly undermine destination image and trust, making traceability and rapid recall capability core to risk management at the Brisbane 2032 Games. Australia's strong border and biosecurity protocols provide a solid foundation, and Food Standards Australia New Zealand (FSANZ) continues to strengthen food safety requirements. A key example is Standard 3.2.2A (Food Safety Management Tools) which became enforceable for food service and retail businesses in December 2023 (Food Standards Australia New Zealand, 2023). These standards mandate additional measures such as documented food safety programs, staff training, and record-keeping to ensure compliance and reduce contamination risks. For Brisbane 2032, these requirements are highly relevant because the event involves large-scale catering, hospitality, and temporary food outlets serving international visitors. Implementing these standards rigorously will help maintain consumer confidence, protect public health, and uphold Australia's reputation as a safe destination during a globally visible event.

Perception gaps and messaging research is needed on what international audiences perceive to be "Australian food/cuisine" to address the potential risk that international visitors might overgeneralise what Australian food is (and can be). International guests may not realise how deeply multicultural Australian society is, and as a result "Australian food/cuisine" is inherently broadly international. Being hosted in Queensland,

there are also opportunities to showcase and highlight the state-level distinctiveness of Queensland/ Northern New South Wales ingredients, i.e., placing emphasis on regional provenance. Addressing the gap requires developing consistent regional origin labelling for products which are showcases at the Games. Whilst it will be possible to automatically generate multilingual content through augmented reality, it should not be solely relied upon. Low tech solutions (i.e., clear physical signage and labelling) should be priorities first to aid comprehension and trust at the point of choice, without requiring consumers to use technology.

Academic research demonstrates that educating customers about produce and service expertise leads to increased loyalty and spending across a wide range of sectors including cafes/hospitality venues (Bell et al., 2017). Brisbane could develop unique food service experiences that position international cuisines within an Australian context, with the aim of informing and educating visitors to the Games about the diversity and authenticity of Australia's multicultural culinary landscape. Importantly, this approach should not involve presenting Australian cuisine as "fusion food," but rather offering culturally authentic representations of international cuisines. To achieve this, research should identify food trends popular in the home markets of the largest inbound tourist communities and map the available offerings in Brisbane at the time of the Games. Showcasing Brisbane's world-class interpretations of international cuisines crafted with premium local

ingredients can serve as a powerful strategy for educating visitors on what “authentically Australian cuisine” means.

Rather than presenting fusion dishes, this approach emphasises cultural authenticity while highlighting Australia’s unique produce and culinary creativity. Example menu items could include, but not limited to:

- i. Japanese omakase sushi featuring Queensland coral trout, spanner crab, and Mooloolaba prawns;
- ii. Italian pasta dishes paired with Queensland-grown macadamias and local extra virgin olive oil from the Granite Belt;
- iii. Middle Eastern mezze platters incorporating Queensland chickpeas, native finger limes, and bush herbs;
- iv. Indian curries using Queensland lamb and seasonal vegetables from the Lockyer Valley; and
- v. Latin American-style grilled dishes showcasing premium Queensland beef and native bush spices.

By framing these offerings as distinctly Australian experiences, Brisbane can celebrate its multicultural identity and position local sourcing as a hallmark of quality and sustainability during the 2032 Games. This strategy would balance the needs of domestic majority volumes with high-spend international niches, creating experiences that are both authentic and commercially viable.

Diversity of preferences and price sensitivity

The discussion thus far has focused on facets of feeding consumers at the Games which might only apply to one segment on the market. However, it will be important to recognise the heterogeneity in consumer preferences by acknowledging that not all tourists will prioritise aspects like traceability and provenance. Mass market preferences will be driven by taste, value, and convenience. As such, the portfolio must necessarily also to include and promote iconic low-cost items (e.g., dagwood dogs, sundaes, “democracy sausage”).

At the roundtable discussion, it was asserted that there is “no junk food, just junk diets.” This ethos captures the idea that indulgence can be enjoyed as part of healthy balanced diet. Policy must avoid prescribing taste and instead enable informed choice and “healthy defaults.” To operationalise this, food service strategies should adopt a tiered approach that accommodates diverse consumer segments. Premium offerings can highlight provenance and sustainability for high-spend visitors, while mainstream menus should prioritise affordability and familiarity without compromising on safety or quality. This dual strategy ensures inclusivity and reflects the Olympic spirit of diversity, catering to both adventurous food explorers and those seeking comfort and convenience.

In addition, communication and labelling play a critical role in enabling informed choice. Clear

nutritional information, allergen disclosures, and sustainability indicators should be integrated into menus and signage, complemented by digital tools for those who seek deeper insights. By combining transparency with flexibility, Brisbane 2032 can champion a food environment that celebrates cultural diversity, supports health-conscious decisions, and respects individual preferences. This will enhance visitor satisfaction and reinforce Australia's reputation for hospitality excellence.

Structural shifts in demand

There is emerging evidence that consumers are transitioning towards preferring smaller portion sizes, higher satiety, and lower sugar options, alongside declines in highly processed categories and shifts in away-from-home dining occasions (Liu & Haws, 2020; Papagiannaki & Kerr, 2024; Robinson et al., 2022).

These trends reflect growing health consciousness and a desire for balance rather than restriction, with consumers increasingly seeking nutrient-dense meals that deliver satisfaction without excess calories or added sugars. The reduction in highly processed food consumption also signals a move towards fresh, minimally processed offerings, while changes in away-from-home occasions suggest that consumers are prioritising quality and experience over quantity.

More specifically, research has forecast that as many as one third of consumers by 2030 to be recipients of GLP-1 medications (e.g.,

Ozempic, Wegovy, and Zepbound) (Hristakeva et al., 2024; Monaco, 2025). The structural effects of this will be measurable reductions in purchases of high-carb/high-sugar items and a tilt toward protein/fibre-forward offerings. These effects vary by income and time on medication, but the signal is clear that menu and product architecture should explicitly accommodate this emerging cohort.

For Brisbane 2032, these shifts have significant implications for menu planning and food service strategy. Catering for a global audience will require balancing indulgent, iconic Australian items with health-forward options that align with evolving consumer expectations.

Smaller portion formats, menus featuring high-quality Queensland produce, and reduced-sugar alternatives can help meet these demands while supporting sustainability and minimising food waste. By integrating these trends into the Olympic food portfolio, Brisbane can position itself as a leader in responsible hospitality, offering choice, promoting health, and enhancing visitor satisfaction without compromising cultural authenticity or enjoyment.

Opportunities

Reimagined community engagement and volunteering ("human + digital")

In a world saturated with AI and automation, volunteers can differentiate Brisbane with "real human experiences" by micro-storytelling about local ingredients,

introducing and including visitors within culinary traditions (such as low-key sausage sizzles). Opportunities to showcase Indigenous ingredients should also be explored, as well as opportunities to involve local residents in providing local level neighbourhood hospitality (e.g., within public green spaces). By pairing trained human hosts with digital layers to extend stories, truly authentic human-to-human level engagement can be provided whilst also meeting the minimum necessary requirements to provide allergen info and handle wayfinding. Local volunteer groups (e.g., local sporting clubs) could be engaged through small-grant programmes and shared resource hubs to scale presence and consistency. Dr Thomas Magor, notes that public barbecues can be a signature Brisbane experience if we keep them relaxed and local. Volunteers can share short, practical stories about local ingredients and neighbourhoods while guests enjoy simple food done well. It's a lowcost, highconnection way to welcome people into our everyday culture.

Government–industry coordination (FaBA and Indigenous partnerships) Queensland Government partnerships and UQ's Food & Beverage Accelerator (FaBA) have shown that platform-style collaboration that links research, industry and policy can accelerate codesign of supply, commercialisation pathways, and procurement; a precedent is FaBA's Food AI White Paper, which sets out governance and implementation frameworks for responsible, crossstakeholder innovation (McColl-Kennedy & Hine, 2024).

To ensure Indigenous producers benefit economically, trials of utilising emerging technologies such as blockchain-enabled provenance checking for Indigenous foods providers should be adopted (Powell et al., 2024). Such design approaches to governance and intellectual property protection ensure that provision of Indigenous ingredients remain aligned with community priorities. Realising the opportunities to showcase Indigenous food respectfully must be achieved through co-created storytelling and clear provenance, whilst ensuring cliches are avoided.

Indigenous communities have historically missed opportunities to claim a tangible branding model for native ingredients. Perhaps one of the most well-known case studies is the macadamia nut, which internationally many mistake for being native to Hawaii (Wessell, 2022). It is in fact native to Queensland and New South Wales, including the region surrounding where the Brisbane 2032 Games will be held. Despite Indigenous communities having a long history of using macadamias for food, trade, and ceremony, the global macadamia trade is not predominantly Indigenous-owned. For emerging Indigenous ingredients, as well as legacy ingredients including macadamias, the Games presents an opportunity to highlight origin stories to build and establish stronger Indigenous business opportunities.

Food culture positioning: inclusive, authentic, and story-rich

The Brisbane 2032 Games are to be held in the middle of Brisbane's winter season. As Brisbane's winters are notably mild, this should be leveraged to create signature outdoor experiences which can be enjoyed during the mild conditions. Signature events could include large scale "public barbecue" events as a form of relaxed mass social gathering, that is culturally authentic. They can be utilised to curate a spectrum of culinary experiences that from high-end Queensland ingredients how cases to iconic low-cost items that reflect Queenslanders' down-to-earth character.

"Place changes how food feels. A simple meal by the river or with a great view becomes a memory because the setting does part of the work. If we anchor more experiences in special spots, we lift the whole perception of quality."

Dr Lisa Ruhanen, Professor in Tourism, Business School, The University of Queensland

Technology and innovation in experience design

There is an opportunity for Queensland to establish a mandate for traceability standards for official Brisbane 2032 affiliated food. This could entail publishing supplier audits against Queensland's labour hire licensing regime and federal Modern Slavery Act reporting. Combine regional origin visuals and short stories to build trust and celebrate local producers. For Indigenous ingredients, pursue

sustainable scaling with co-governance and intellectual property protection, learned from recent design studies and supply chain assessments. This could be used to develop scalable ways of communicating provenance at stalls and venues, enabling quick scans for origin, certifications, ethical labour compliance, and allergen transparency. Current technology available for this comprises using QR codes, although by 2032 alternative forms of information delivery may be quicker, more secure and more reliable. Research shows consumers value traceability and, in some contexts, will pay a premium (Pozelli Sabio & Spers, 2022; Sansome et al., 2025). The most important aspect to get right is that a sense of place is established and that technologies are used appropriately to reduce decision friction.

Adjacent opportunities in beverages: coffee, non-alcoholics, and water beverages will naturally complement every food experience as part of the efforts involved in feeding the Brisbane 2032 Games. The rapid growth of the non-alcoholic beverages category should be leveraged by curating premium producers and functional zero-proof options that align health-forward preferences. In addition to commercial offerings, opportunities to promote sustainable hydration of still water without reliance on bottled options should be established. This may entail engaging and supporting Seqwater (the statutory authority of the Queensland Government responsible for managing the bulk water supply for Southeast Queensland) to supply safe drinking water through a comprehensive network of refill stations. This would be

provided in strategic locations broadly dispersed across the entire Brisbane region, but specifically in and around the venues and tourist hot spots. This reinforces sustainability and access to safe, clean drinking water at venues and across the city. Co-branding opportunities with reusable water bottles should be explored to create a strong sustainability narrative and enhance visitor engagement during the Brisbane 2032 Games. These bottles could serve as official merchandise featuring event branding, Indigenous artwork, and local cultural motifs, making them desirable souvenirs for tourists. Partnerships with premium hydration brands and hospitality providers could integrate bottles into welcome packs at hotels or tour packages, while QR codes or NFC labels embedded into the bottles could link to maps of refill stations and sustainability messages. By combining practical utility with cultural storytelling and sustainability, reusable water bottles can become a powerful marketing tool and a tangible symbol of Brisbane 2032's commitment to environmental responsibility.

Conclusion

Feeding Brisbane 2032 ultimately requires a system thinking approach: coordinating government, industry, communities, and indigenous partners to deliver trustworthy, story-rich, and operationally excellent food experiences. Tourists as consumers will arrive with digital expectations, traceability demands, and diverse preferences that include a rising cohort that seek smaller, higher-satiety, lower-sugar options. By combining human hospitality with smart digital layers, enforcing ethical and provenance standards, and curating a tiered portfolio from premium showcases to iconic value fare, Brisbane can deliver a food culture that feels authentically Queensland, safely delivered, and future ready. The legacy this establishes will extend beyond the Games: stronger supply chains, more inclusive community engagement, enhanced reputational capital for Queensland's ingredients and producers, and a living model of customer value co-creation where visitors, hosts, and producers jointly shape the Brisbane 2032 experience.

Pictured: Tony Hunter and Allison Bambrick



Recommendations for policy and practice

Reflecting on the challenges and opportunities we identified, we provide six recommendations to improve the experience of tourists' consumption during the Brisbane 2032 Games.

1. Pair trained humans with simple digital tools to move crowds smoothly and enrich visitor interactions. Establish a volunteer corps with micro grants for local groups to host micro events and staff kiosks; require baseline digital wayfinding, menus, allergen with provenance. Train cultural competency and micro storytelling, deploy virtual queuing, and partner with accredited ready made meal providers to ease pressure on restaurants.

2. Ensure all Games affiliated food is traceable, fair, and safe. Mandate QR linked provenance and Modern Slavery alignment with periodic audits, embed co governance for Indigenous ingredients, publish a public vendor register integrated into multilingual signage, and implement rapid recall and incident communications aligned with national food safety standards and WHO guidance.

3. Create an International Taste Mapping lab and adopt satiety forward menu design. Create a cross sector taste lab (QLD Government, Industry, UQ FaBA, Indigenous partners) to guide tiered offerings and issue guidelines for smaller portions, higher protein/fibre, lower sugar, clear labelling, flexible portion formats, functional beverages, and hydration/refill infrastructure suited to seasonal conditions.

4. Make service and sustainability performance visible in real time. Require venues to publish live metrics, such as wait times, seating, waste diverted, energy intensity, water refills, via open dashboards and apps, standardise data definitions and cadence, install multilingual QR signage, instrument back of house for measurement, and issue regular transparency updates with corrective actions and public recognition.

5. Embed inclusive nutrition and safety by design in every customer touchpoint. Mandate consistent allergen and dietary labelling and accessible multilingual, screen reader friendly menus. Ensure balanced quick bite options and accredited pre batched meals, enforce clear allergen handling and wayfinding, and provide quiet zones with family friendly seating.

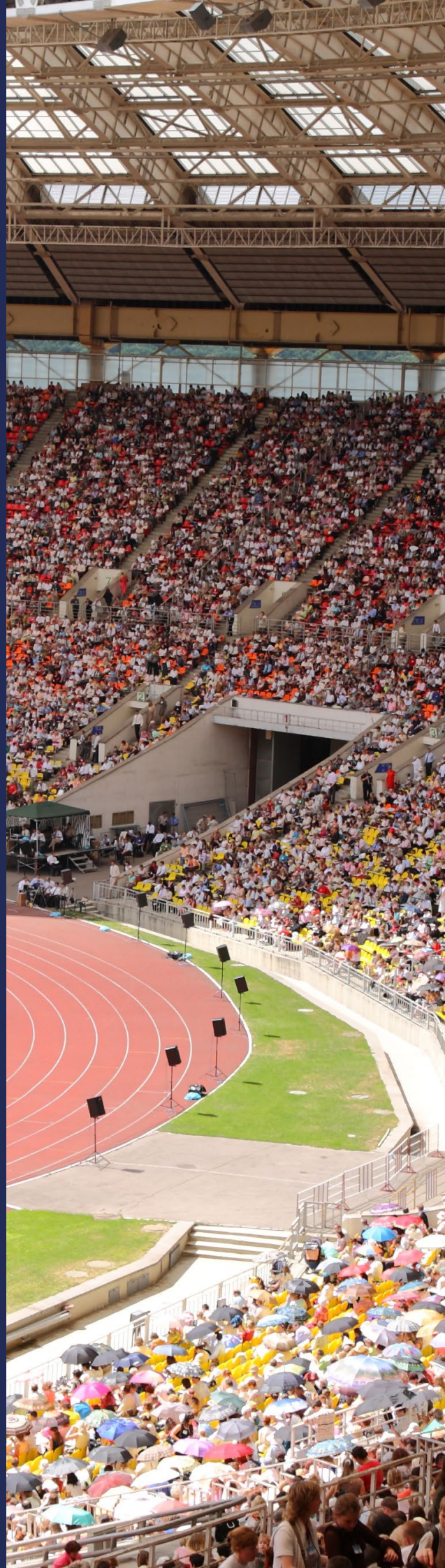
6. Establish privacy safe feedback loops and a continuous improvement system. Create an independent oversight unit with robust data privacy standards and consent flows, run rolling intercept surveys and multilingual sentiment analysis, convene vendor learning circles to share practice, and publish regular "what is changed" summaries.

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Chapter 6

Fans and families as consumers



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Introduction

The experiences and behaviours of fans and families are central to understanding the overall success and legacy of major sporting events. These groups determine commercial success both within and outside venues, and their consumption patterns offer critical opportunities to influence positive social outcomes related to health and wellbeing. Brisbane 2032 aims to “deliver a unique and meaningful experience for all stakeholders” (Queensland Government, 2024), making a comprehensive understanding of fan and family consumption habits essential.

While structural constraints dominate modern sporting venues, social rituals remain profoundly influential (Koenigstorfer et al., 2018). Fans often consume food as part of a shared cultural experience, reinforcing traditions deeply tied to sport. Traditionally, food consumption at sporting events has been shaped by perceived sport culture—what people believe they should eat or drink to fully immerse themselves in the experience (Carter et al., 2013). These choices have been reinforced by social influence (sharing food and

drinks with friends or fellow spectators) and the tribal effect, where allegiance to a team or sport dictates consumption norms.

For example, beer and hot dogs have long been synonymous with baseball culture in the U.S., while meat pies and beer are staples for Australian Rules Football fans. Similarly, soccer fans in Europe often associate match day with pints of beer and hearty pub-style fare, reinforcing the idea that “this is what you eat and drink with your mates.” These traditions have historically created a sense of belonging and identity, making food and beverage choices an extension of fandom itself (Carter et al., 2013).

However, this traditional landscape is evolving rapidly. Today's fans increasingly expect personalised experiences that reflect their individual values, dietary needs, and lifestyle preferences. This transformation creates both significant challenges and unprecedented opportunities for Brisbane 2032 to establish a meaningful legacy that extends far beyond the Games themselves.

Challenges

Traditional constraints on fan consumption inside venues

Despite growing consumer demand for healthy food options, consumption inside stadiums remains heavily constrained by structural, commercial, and operational factors that favour nutrient-poor, energy-dense foods and beverages (Martin et al., 2017). These constraints are deeply rooted in sponsorship dominance, logistical requirements, and security protocols, which collectively shape what fans can—and cannot—consume during major sporting events.

Sponsorship dominance and limited choices

The prevailing image of stadium food remains traditional: “a lot of unhealthy foods, foreign alcohol, not many choices, expensive food items”, as noted by Melanie Anderson from Queensland Tourism Industry Council. This perception reflects decades of standardised consumption patterns driven by exclusive sponsorship agreements (Carter et al., 2013).

Official sponsors of major events secure contractual rights to become exclusive food and beverage suppliers, gaining access to the event's intellectual property to build strong brand associations. This strategy facilitates consumer learning, reinforcing the link between sponsors and the event or fans' favourite teams, ultimately influencing purchasing decisions (Bragg et al., 2018).

In the case of the Olympic and Paralympic Games, the International Olympic Committee (IOC) enlists 15 TOP sponsors—global corporations granted the highest level of sponsorship rights and exclusivity (Pelly et al., 2023).

These sponsors enjoy unparalleled association with the Games, while organising committees for each edition maintain their own sponsorship tiers, allowing some involvement by national or local businesses. However, Olympic sponsorship rights are strictly commercial, meaning non-sponsors cannot create any association with the Games. This severely limits visibility for smaller enterprises, though they may participate indirectly through procurement contracts and supply arrangements (OECD, 2024).

The challenge is particularly acute for family-run businesses in tourism and hospitality, including First Nations enterprises, which often lack the resources to meet procurement requirements or scale production for mega-events (Queensland Government, 2024). Local producers have massive opportunities, visitors see local foods as a key attraction, but the challenge is how to make this supply chain and demand continue after the Games.

The scale of sponsorship influence is immense: sports sponsorship is a \$37 billion global industry (CNN, 2018), making entry prohibitively expensive for SMEs that typically offer healthier or culturally distinctive products.

Operational and accessibility hurdles

Operational realities compound these limitations. Serving up to 70,000 spectators within short catering windows demands speed and efficiency, which inevitably restricts menu diversity (Pelly et al., 2023).

Operationally this can be challenging. Complex menus slow service and increase congestion, leading caterers to favour simplified, high-volume options over personalised or health-oriented choices.

Security measures further constrain flexibility. Restrictions on bringing outside food—primarily designed to protect sponsor exclusivity—are increasingly viewed as a “commercial shackle”, particularly by parents of children with allergies or intolerances (Kelly et al., 2013).

This rigidity clashes with modern expectations for dietary accommodation and personalisation, creating friction between commercial imperatives and consumer needs.

Cultural, sport, and peer influence

Even as personalisation rises, social dynamics remain a powerful force in shaping fan food choices (Koenigstorfer et al., 2018). Group or peer influence continues to play a critical role, as peer influence is important when it comes to food consumption by fans. For example, Australian fans at the Paris Olympic Games tended to go down to the pubs or bistros together, having a couple of beers and enjoying a chat. This social bonding reinforces the

cultural connection between food, sport, and community (Carter et al., 2013).

Food consumption is deeply tied to sports culture, routines, rituals, and celebrations. Interestingly, emotional responses to game outcomes also influence choices. When a fan's favourite team loses, people tend to choose unhealthy food as well. This suggests that emotional eating patterns persist even as health-conscious trends grow, creating opportunities for venues to offer comfort foods with a healthier twist.

The expectations of families and Generation Alpha

Families represent a complex market segment within the fan experience ecosystem, where expectations around food and beverage offerings are evolving rapidly. These expectations are shaped by parental attitudes, generational mindsets, and the growing influence of athletes and technology.

Parental attitudes

For many parents, attending a sporting event is framed as a special occasion—a break from everyday routine, a treat. This perspective reflects a dual expectation: indulgence remains part of the experience, but parents increasingly seek healthier alternatives alongside traditional stadium fare. For example, families may still enjoy hot chips or ice cream but also look for fruit cups, low-sugar beverages, and allergen-friendly snacks.

This aligns with broader trends such as Australia's reduction in sugar-sweetened beverage intake and the growing diversity of food and drink options available to consumers, as highlighted by Professor Lauren Ball, School of Public Health and School of Human Movement and Nutrition Sciences, The University of Queensland: "Australians' sugar intake has reduced, and there's a trend toward more diverse options for consumers." National data confirms this shift: the proportion of average daily energy intake from discretionary foods declined from 35.4% in 2011–12 to 31.3% in 2023 (Australian Bureau of Statistics, 2023). Star rating of foods can be helpful for consumers, suggesting that transparent nutritional labelling will resonate strongly with health-conscious fans.

Generation Alpha demand

Generation Z and Generation Alpha—the youngest cohorts of fans—have grown up in an environment where everything is accessible (Glanbia Nutritionals, 2023). This mindset drives expectations for personalisation and flexibility, including the ability to bring food into venues to accommodate allergies, intolerances, and health concerns. These fans and their families expect stadiums to cater to vegan, flexitarian, Halal, and allergen-free diets while maintaining convenience and taste (Datassential, 2024).

For these younger generations, food is not just sustenance; it is a form of self-expression, and they gravitate toward customisable, experiential, and socially conscious options (Mintel, 2025). For example, build-your-own

bowls, plant-based burgers, and sustainable packaging resonate strongly with this demographic. Generational differences have experienced different options and therefore are not tied to rules or rigid ideation. This flexibility underscores a rebellious streak against traditional norms (Hughes & Hunter, 2024).

Athlete Influence and Autonomy

Athletes—long considered role models for young fans—are themselves evolving in ways that reflect Gen Z and Gen Alpha's values. Increasingly, athletes are less willing to accept restrictive sponsorship contracts, particularly those dictating what they eat or promote on social media. As Associate Professor Monica Chien, Business School, The University of Queensland, noted, "Athletes may be less inclined to accept contract restrictions that govern what they eat or what they communicate on their own social media." This creates tension between athlete autonomy and sponsor control, challenging traditional marketing models.

For brands, this means messaging aimed at younger generation fans must leverage peer influence and AI-assisted technology. Technology, AI-assisted, peer-to-peer persuasion will be critical in shaping food choices. Additionally, hooks such as sustainability will play a pivotal role in influencing this generation (Hughes & Hunter, 2024).

Fan engagement challenges

Beyond venue-specific constraints, five systemic challenges threaten the

fan and family experience at Brisbane 2032:

- i. Marketing integrity: Athlete endorsements of energy-dense, nutrient-poor foods create a “health halo” around unhealthy products, which leads parents to perceive them as healthier and increases their willingness to purchase them for their children (Harris et al., 2018). The majority of products promoted by professional athletes are “energy dense and nutrient poor” (Bragg et al., 2013; Bragg et al., 2017).

Research demonstrates that sports celebrity endorsements significantly influence pre-adolescent children’s food preferences, with premium offers and nutrient content claims further amplifying these effects (Dixon et al., 2014).

- ii. Equity and access: Food security is a profound concern: how likely is it that someone in Brisbane, a family will go hungry during the games despite our food supply...?

Nationally, “one in eight households and one in four, low income” suffers from food insecurity (Australian Bureau of Statistics, 2023). These concerns are particularly relevant given the documented history of housing rights issues and displacement associated with mega-sporting events (COHRE, 2007; Baka, 2023).

- iii. Governance gap: A key problem is the lack of clarity regarding food policy and planning. The discussions are disjointed,

leading to the danger that policy preparation becomes everybody’s business and nobody’s business. This challenge is compounded by the complexity of implementing policies and practices in sporting organisations that target poor diet and related health issues (Wolfenden et al., 2018).

- iv. Procurement barriers: The constraints of QA and 24/7 SLAs really makes it extremely difficult to small to medium businesses to be able to supply the Games. Furthermore, food policy standards need to be influenced now before it goes to tender (OECD, 2024).
- v. Ambush marketing: Sponsors who are not official partners use tactics like “ambushes”, employing subtle terms like “proud sponsor of Australian high achievers” to create the public perception that they are official sponsors. This competition can distract fans and dilute the impact of legitimate partnerships (Kelly et al., 2015).

Opportunities

Rise of personalisation and fluid consumption

The traditional model of fan food consumption—anchored in uniform offerings and cultural norms—is rapidly giving way to a more personalised, fluid, and health-conscious paradigm (Prowse et al., 2023). Fans today expect food experiences that reflect their individual values, dietary needs, and lifestyle preferences rather than conforming to rigid traditions.

Recent insights highlight a clear movement toward personalisation and individualisation. Fans are no longer satisfied with one-size-fits-all menus; instead, they seek options that align with their health goals, ethical considerations, and cultural identities. This shift mirrors broader national trends: the proportion of average daily energy intake derived from discretionary foods has declined signalling a move away from high-calorie, low-nutrient choices (Australian Bureau of Statistics, 2023). Similarly, alcohol consumption has dropped by 20.7% over the past decade (Australian Bureau of Statistics, 2023), challenging the long-standing association between sporting events and alcoholic beverages.

There is an emerging change in how fans consume food, and that is more and more personalisation, individualisation, and personal choices. This evolution means that sports fans' food choices are becoming more fluid—not as rigid as traditionally assumed. Fans increasingly blend health and indulgence, opting for menus that allow enjoyment without compromising wellness goals. For example, stadiums are introducing protein-rich snacks with gourmet flavours, plant-based burgers, and low-sugar beverages alongside traditional favourites (Intel, 2025).

Opportunities beyond the venue

Fans increasingly venture outside stadiums into surrounding precincts for greater variety, authenticity, and flexibility in food choices (Martin et al., 2017). As Professor Bruce Abernethy, Office of 2032 Games Engagement, The University of Queensland noted,

“High streets present opportunities for catering that provides more healthy food options.” This trend reflects a growing desire for local experiences, which stadium concessions often fail to provide due to sponsorship and operational constraints.

Importantly, the boundary between family fans and tourists is becoming increasingly blurred. Major sporting events attract not only international visitors but also domestic travellers who often visit friends and family during the Games.

These gatherings frequently involve shared meals and social dining experiences, creating a dynamic interplay between local food culture and global visitor expectations. The boundary between tourists and residents is blurred, and hence the foods being consumed. This means food decisions are influenced by cross-cultural interactions, where families hosting visitors may seek out distinctive local cuisines, while tourists may adopt local dining habits or introduce their own preferences.

“Collaborate with surrounding precincts to create health food trails or cultural food zones as official extensions of the event.”

Peter Wolff, Director, Wolff Coffee Roasters

Beyond the precinct, individual behaviours are shaped by sporting activities in everyday life—from local sports clubs and school or university teams to gym sessions and community fitness programs. Coaches, instructors, and peer groups sometimes influence

dietary habits, reinforcing norms around performance nutrition and healthy eating (Carter et al., 2012).

A critical question emerges: Can eating habits developed in our daily environment influence eating practices inside stadiums, and vice versa?

This question underscores the potential for bidirectional influence:

- Everyday habits: Stadium choices: Fans accustomed to high-protein snacks or low-sugar drinks through gym culture may seek similar options at venues.
- Stadium experiences: Exposure to branded products or high-energy items during events can normalise less healthy choices outside the venue (Koenigstorfer et al., 2018).

Athlete endorsements amplify this dynamic. High-profile athletes frequently promote food and

beverage brands through commercial partnerships and social media, shaping consumer perceptions of what is “sport-appropriate” (Bragg et al., 2013). This creates both opportunities and risks: while athletes can champion healthier options, sponsorship-driven promotions often favour processed or indulgent products (Bragg et al., 2017).

“Athletes are powerful role models, and their food choices and endorsements can strongly influence children’s food preferences and consumption.”

Dr Sandra Pavey, Director, Research and Impact, Health and Wellbeing Queensland

To leverage these connections, mechanisms such as integrated health campaigns and cross-platform messaging could align stadium offerings with national dietary guidelines and everyday sports nutrition practices (Wolfenden et al., 2018).

Pictured (left to right): Professor Lauren Ball, Dr Sandra Pavey, Kym Cooper, Dr Kaushalya Premachandra, Professor Bruce Abernethy



Strategic opportunities for fan engagement

Six key opportunities exist to enhance the fan and family experience at Brisbane 2032:

- i. Local identity market: Fans and families are not constrained to the venues; “They venture into the city; they venture into other areas like other tourists”. This is a “major opportunity during the games where Brisbane or Southeast Queensland could actually promote local produce... first nation foods and alternative dining experiences”(Queensland Government, 2024).
- ii. Fan demand: Tourists and international fans look for local food and produce rather than known global brands. This opportunity lies in “nonclean venues” where international fans will congregate.
- iii. Scale and scope: The market size is significant: an estimated 3 million visitors, plus an additional “20% on top of that” (friends and family) (Queensland Government, 2024). This dispersed market includes “local residents or people will take their friends out for dining for entertainments”.
- iv. On-the-go consumption: Opportunities exist at customer contact points where fans are transiting, such as “service station gyms”. New models, like “hot food vending machines”, can cater to the 24/7 needs of fans.
- v. Policy leverage: The recognition that McDonald's ended its Olympic sponsorship shows that someone at some level recognises the lack of alignment between unhealthy food and sport (Children's Food Campaign and Food Active, 2021), providing an opportunity for messaging to be “a little more aligned” with health goals.
- vi. Legacy building: The consumption patterns and behaviours acquired by sports fans and families during mega-events can flow on to influence their daily life. This requires advocating for policy changes, making it clear that a necessary step is appointing a food and beverage coordinator appointed by Brisbane 2032.

Conclusion

The core challenge remains the tension between the constrained commercial environment of official venues and the expansive demand of fans and families seeking authentic, healthy, and diverse experiences beyond stadium walls (Martin et al., 2017). This duality presents both the central obstacle and the primary opportunity for Brisbane 2032.

To successfully leverage the Games and meet the needs of all families and spectators, coordinated policy action is essential (Wolfenden et al., 2018).

Currently, efforts remain “disjointed” and risk missing vital opportunities, particularly in integrating First Nations food and culture into

the fan experience (Queensland Government, 2024). Success hinges on influencing the procurement process “now before it goes to tender” and ensuring that questions of health equity are formally considered in all planning stages (OECD, 2024).

The scale of the opportunity is substantial: an estimated 3.6 million fans, alongside friends and family, will engage with Brisbane and Southeast Queensland during the Games. This represents an unprecedented platform to showcase local produce, First Nations foods, and alternative dining experiences while simultaneously advancing public health goals.

Brisbane 2032 has the potential to break this pattern by addressing structural challenges head-on and maximising high street engagement. By doing so, the Games can deliver an experience that resonates not just with visitors during the event itself but establishes a positive and equitable food legacy for local families and communities for years to come (OECD, 2024).

The path forward requires balancing commercial realities with evolving consumer expectations, leveraging technology and athlete influence authentically and ensuring that policy frameworks support both immediate event success and long-term community wellbeing. Meeting these challenges will determine whether Brisbane 2032 becomes another mega-event or a transformative moment in how sporting events engage with food, health, and culture (Queensland Government, 2024).

Pictured (left to right): Associate Professor Monica Chien, Professor Sarah McNaughton, Peter Wolff



Recommendations for policy and practice

Based on the synthesis of roundtable discussions, six recommendations emerge.

1. **Reform sponsorship and procurement.** Develop alternative sponsorship models that prioritise local businesses offering healthier or culturally unique options, including co-branding opportunities under curated themes such as First Nation hero products or sustainability picks. Establish procurement frameworks that enable small and family-run businesses to participate during and beyond the Games, with early clarification on food provision responsibilities and compliance requirements. Build robust supply chain planning with ISO food certification to ensure local sourcing capacity, quality assurance, and food security at scale.

2. **Improve operations and accessibility.** Allocate specific stadium zones or kiosks for local and special dietary offerings to reduce bottlenecks while maintaining operational flow. Introduce exception policies for families with dietary restrictions or allergies, supported by verification systems that humanise commercial restrictions. Clearly communicate the rationale behind these restrictions while providing visible, suitable alternatives that build trust and accommodate diverse dietary needs.

3. **Enhance fan experience.** Expand menus to include allergen-friendly, plant-based, and culturally inclusive options including vegan/vegetarian, Halal, Kosher, and gluten-free choices alongside traditional favourites. Deploy digital ordering systems enabling real-time meal personalisation and AI-assisted recommendations based on individual preferences and health goals. Align all packaging, sourcing, and messaging with environmental values to engage sustainability-focused younger generations. Prioritise authentic athlete endorsements reflecting personal choice rather than rigid sponsorship contracts, acknowledging athletes' growing resistance to restrictive agreements around food consumption and social media communications.

4. **Activate precincts and engage high streets.** Collaborate with surrounding precincts to create healthy food trails and cultural food zones as official event extensions, capitalising on fan movement throughout the city. Partner with athletes to endorse balanced meal options within stadiums and precincts, leveraging their influence on children's food consumption to counter fast-food brand dominance. Launch integrated campaigns across venues, schools, and sporting clubs linking in-venue choices with broader health goals such as Eat Like Your Hero promotions, aligning stadium offerings with national dietary guidelines.

5. **Coordinate governance and policy.** Appoint a dedicated Food and Beverage Lead Organisation for Brisbane 2032 to ensure cohesive planning and prevent fragmented policy development. Enable Queensland government leadership to establish minimum health standards, sustainability requirements, and compliance frameworks aligned with public health objectives. Implement star rating systems and clear nutritional labelling aligned with national health trends, including

reduced sugar intake and increased plant-based options. Influence food policy standards before tender processes commence to embed health equity, local sourcing, and sustainability from the outset rather than retrofitting later.

6. Develop a comprehensive legacy framework with sustainability metrics. Promote consumption behaviours acquired during the Games positively influence daily life beyond the event, with measurable outcomes for community health and local business sustainability.

By implementing these recommendations, Brisbane 2032 can deliver an exceptional fan experience while establishing a meaningful legacy that benefits local communities, supports public health goals, and showcases Queensland's unique food culture to the world.

Pictured (left to right): Professor Bruce Abernethy, Associate Professor Monica Chien, Professor Sarah McNaughton, Peter Wolff, Melanie Anderson, Professor Lauren Ball, Kym Cooper, Dr Kaushalya Premachandra



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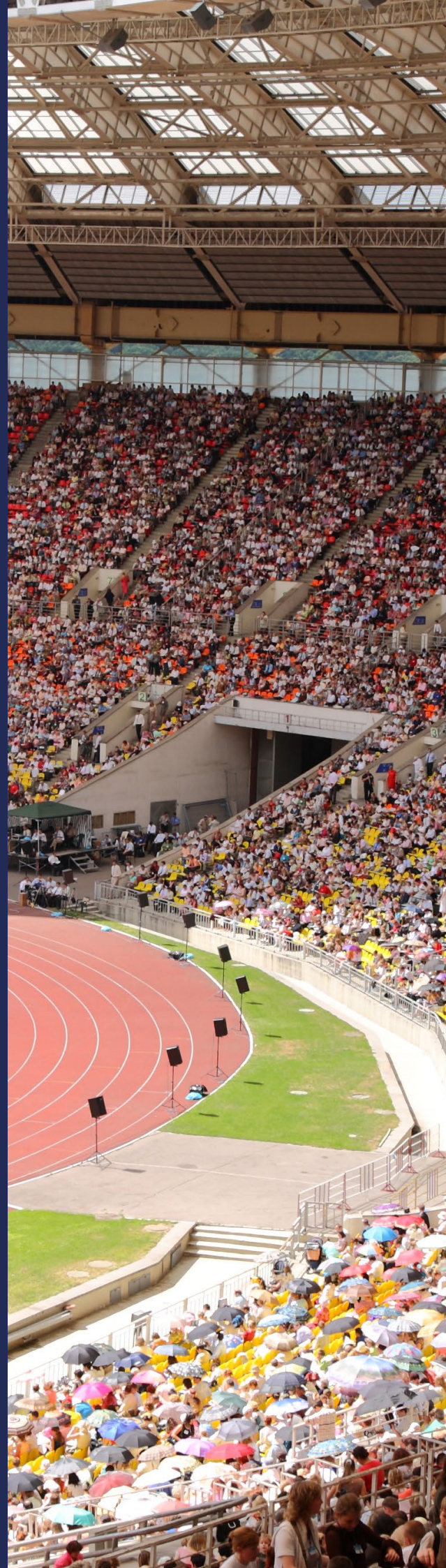
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Chapter 7

AI-enabled marketing and communication



Leads: Janet McColl-Kennedy and Fiona Willer

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Introduction

"From chatbots to social media management to full-scale marketing campaigns automation, artificial intelligence is changing the way marketers do their jobs. Routine tasks like writing copy, mining consumer data, and creating visuals that once took hours can now be done in minutes. Businesses should view AI as an opportunity to provide more customized and relevant marketing experiences...." (Russell, 2025, 1).

Artificial Intelligence (AI) is changing the way we undertake marketing and communications. AI enables not only the collation and synthesis of unstructured data like images, emails, and text files, AI helps in analysing and making sense of the data. Customer data varies widely in format, sequence and frequency which traditionally has posed significant challenges to determining what it all means and how to use the data-driven insights.

Generative AI and advanced analytics offer access to innovative methods and tools (McColl-Kennedy et al., 2024) which allow for more sophisticated data interpretation, helping organisations to obtain

deeper insights and creating more personalised customer interactions (Zaki & McColl-Kennedy, 2020).

While generative AI tools such as ChatGPT may offer suggestions for relatively simple tasks such as crafting social media posts, the real game changer is customised Large Language Models (LLMs) that can use very large and diverse datasets to provide evidence-based, data-driven insights and recommendations (McColl-Kennedy et al., 2025).

These models can simultaneously work with a wide range of textual data from various sources, such as customer blogs, customer chat groups, product review websites, industry and government reports, and the organisation's own social media posts, as well as survey and interview data (McColl-Kennedy, 2024). As outlined by McColl-Kennedy (2024), some examples of the work include:

- i. performing customer service duties, including responding to customer enquiries through various channels such as call centres, chatbots, emails, text messages, ticketing solutions and social media platforms;

- ii. preparing draft business and marketing reports, summarising content, and generating brand and promotion copy;
- iii. crafting posts for social media channels based on discussion points and threads among key target markets;
- iv. problem solving and handling customer complaints by generating options personalised to the customer and recommending tailored recovery actions and
- v. maximising sales through interpreting and recommending which offer(s) could be most relevant to customer segments and how to communicate these offers effectively.

To unpack communications with customers, consider the following specific examples. When a Brazilian fan's ticket QR code fails to scan, prompting a customer query, the agentic AI model could recognise a known peak-time scanning issue, validate the ticket and deliver an instant offline pass with personalised gate instructions, all in Portuguese. In addition, if congestion rises, the AI model could proactively reroute the fan with real-time gate alternatives or suggest delayed-arrival offers such as a free drink voucher. Alternatively, if an athlete reports that post-competition meals are unavailable or unsuitable, the AI model can access their competition schedule and present ranked recovery options, such as immediate access to an alternative athlete dining hub, prioritise pre-orders for

subsequent sessions, or nutrition supplement credits, escalating only if dissatisfaction persists.

Regarding reports, following the day's events, task-specific agentic AI models can synthesise fan and/or athlete queries and sentiment, operational data and sponsor activity into real-time reports that flag emerging risks, equipping organisers and partners with evidence-based insights to assist decision making. Responding to emerging customer complaints or feedback, the AI model could also propose platform-specific social media posts, informed by sentiment analysis, and pending human-in-loop approval, they could deploy coordinated messaging designed to reduce misinformation and improve real-time fan engagement. Further, for international fans attending multiple evening events, the AI agent could identify high intent for food-and-transport bundles and deliver timely, personalised offers (e.g., pre-order dinner options near the customer's seat) via the most effective channel, refining recommendations in real-time to boost conversion without disrupting the fan experience.

Employing customer experience digital twins would offer even greater personalisation and have the added benefit of offering solutions in real-time even before the customer complains (McColl-Kennedy et al., 2025). That is, building on and extending customer experience (CX) management by integrating customer journey mapping (e.g., Lemon & Verhoef, 2016; McColl-Kennedy et al., 2019) with dynamic, context-

aware inputs across time and space, organisations can anticipate service issues before they occur, discover latent opportunities, and redesign experiences proactively - a real game changer in customer experience management.

Challenges

Key challenges of AI in marketing and communications around the Brisbane 2032 Games

Despite the numerous opportunities presented by the deployment of AI in marketing and communications around the Brisbane 2032 Games, several hurdles may impede effective and equitable use. Together, these challenges, if not managed appropriately, may diminish long-term value for both the community and industry, potentially generating social, operational, or reputational harm.

A key challenge lies in balancing the operational demands of real-time, AI-enabled marketing and communications with the governance requirements arising from data privacy and sovereignty. While many applications (e.g., content creation) can rely on global cloud infrastructure, real-time use cases such as in-venue fan engagement, personalisation, or live language translation require low-latency data processing, where data must be processed immediately to generate meaningful insights and actionable decisions, often necessitating local or edge-based infrastructure (Surianarayanan et al., 2023). At the same time, emerging tensions between personalisation

and privacy create heightened expectations around how customer data is stored, processed, and governed. Without clear coordination between infrastructure deployment and data governance frameworks, these tensions risk undermining trust, compliance, and operational resilience (Ciuchita et al., 2023; Solidigm, 2025). Gail Macleod, CEO AtomIQ Technologies noted that "Mega data centres don't exist here yet. We need one especially now. What we have is not going to do what we need to do."

Ensuring equitable access to AI capabilities remains a challenge, particularly for small businesses and regional councils operating with outdated systems. Some businesses and regional councils are still reliant on 3G networks (Shannon, 2025). Without targeted support, these groups risk exclusion from the economic and technological benefits of the Brisbane 2032 Games, widening the digital divide and undermining community engagement (Fisk et al., 2023). The tourism industry employs over 260,000 Queenslanders, that is, 1 in 11 of all people employed in Queensland (Queensland Government, 2025).

The Brisbane 2032 Games will attract a diverse range of audiences, including Generation Alpha, born from 2010 to 2024, the most digitally native and largest generation in the history of the world (Hunter, 2025; Mohsen et al. 2025). Their digital fluency, being comfortable with AI-generated content, and unique engagement patterns differ markedly from older generations who may be

more cautious about automation and AI.

“It’s worth doing research into consumer perceptions of AI-generated content for different generational segments to understand how expectations and comfort levels vary, ensuring marketing approaches resonate across the diverse cohorts.”

Dr Jordan Pennells, Research Engineer, CSIRO

Queensland's tourism industry is a \$31 billion industry, with domestic and international visitors spending \$110.3 million per day for the year ending June 2025 (Tourism Research Australia, 2025), with tourism contributing \$37.6 billion in Gross State Product (Tourism Research Australia, 2025 b). Cultural and linguistic diversity among international visitors adds further complexity, requiring strategies that respect differences while maintaining consistency and clarity in messaging. In the recent Paris 2024 Olympics and Paralympic Games, the diversity spanned more than 200 countries, bringing together athletes, coaches, support staff, families and fans from a wide range of cultural backgrounds (Seyfort, 2024).

Growing reliance on personalisation amplifies the volume and sensitivity of data collected, including potentially genomic information (Chrissos Anestis & Nilsson, 2025). This raises the stakes for cybersecurity, as breaches could have severe reputational and financial consequences. Recent high-profile data breaches have heightened customer anxiety, making trust a fragile commodity. The Games

must champion world-leading cyber-trust strategies and deep transparency. As stated by Melissa Witheriff, Senior Industry Advisor, Public Sector, Microsoft “The Games must set a global standard for cyber trust—secure by design, transparent by default, and accountable to the people they serve”.

If not strategically executed, AI-enabled marketing and communications may contribute to a collapse of boundaries between scientific information and persuasive communication. AI-generated content often appears neutral and authoritative, blurring the lines between marketing and science, making it harder for customers to distinguish between evidence-based information and promotional messaging (De Bruyn et al., 2022). Without verifiable credibility signals connected to real-world organisations, this ambiguity risks undermining trust and customer safety, particularly in areas such as health and nutrition marketing (Manushi et al., 2025).

“Ensuring transparency in any AI-driven marketing and communication strategies will be important to gain customer trust...”

Claudia Lordao, Senior National Marketing Manager, Metropole Property Strategists

Lastly, there is a persistent tension between efficiency and authenticity. While automation can streamline processes, over-reliance on automation risks diminishing the personal and cultural experiences,

such as engaging with Indigenous cultural heritage, wildlife, nature-based excursions, and locally-rooted storytelling and human-led guides that visitors value (Tourism Research Australia, 2025c). Outdated, biased or false data points can 'poison' AI systems, leading to algorithmic drift within AI models where output becomes exponentially less accurate or representative within the intended service delivery context (McColl-Kennedy et al., 2024). For high-impact or emotive interactions, such as community engagement or premium hospitality, face-to-face communication remains essential.

Dr Anne-Maree O'Rourke, Business School, The University of Queensland, highlighted the importance of recognising that international visitors (fans and athletes) coming to Brisbane for the 2032 Games want to experience Australia and Australian culture. Clearly, this valued experience needs to be factored into the food and beverage options and the associated marketing and communication materials.

Opportunities

Well executed AI-enabled marketing and communication will extend benefits beyond the Games, including regional capability uplift, infrastructure reuse and ongoing tourism and industry outcomes. Accordingly, five key opportunities have been identified. First, data-driven customer insights and personalisation present a significant opportunity. AI can analyse customer attitudes and preferences through sentiment analysis and synthetic audiences, reducing

reliance on traditional surveys and focus groups. This capability enables forecasting of trends and tailoring of marketing strategies to diverse audiences, including fans, athletes, and tourists.

Second, industry development and SME enablement is critical. With 97% of Queensland businesses classified as small businesses (Queensland Small Business Commissioner, 2024), AI tools and data must be made accessible through innovation hubs, mentorship programs, and upskilling initiatives. Establishing a pipeline for prototyping AI-enabled solutions will foster collaboration between students, industry bodies, and academia, ensuring local businesses can participate in and benefit from the Games economy.

Third, customer experience design offers scope for innovation (McColl-Kennedy et al., 2025). AI-powered personalisation can enhance experiences for both physical and digital fans, including itinerary planning, gamification, and virtual influencers. Emerging technologies such as agentic AI (where customer AI interacts with service AI) could redefine convenience and engagement and verify the authenticity of information (Jha et al., 2026). Marketing Australia as a data-driven yet empathetic destination, supported by authentic experiences, will strengthen the Games' global legacy such that when fans and athletes return to their home countries, we can continue to market Australia as an attractive destination.

“I think the legacy is where a lot of the opportunities exist outside of the Games themselves, so naturally a key part of the conversation becomes how we design it to deliver the most impact for what could come after the Games.”

Luke McQuillan, Engagement Manager, Future Food Systems CRC

Fourth, sustainability integration within marketing strategies is an opportunity to align with customer expectations and global standards. Initiatives such as GS1 2D barcodes

(GS1 Australia, 2025) for provenance and sustainability gamification can reinforce trust and transparency while promoting environmentally responsible practices.

Finally, immersive technologies such as digital twins, AR, and VR can create interactive menus, provenance storytelling, and gamified sustainability challenges, enriching the Games experience and extending engagement beyond Brisbane to global audiences (Zainal Abidin et al., 2025).

Pictured (left to right): Dr Fiona Willer, Luke McQuillan, Dr Jordan Pennells, Dr Anne-Maree O'Rourke



Recommendations for policy and practice

Reflecting on the opportunities and challenges identified, we outline six recommendations for leveraging AI to enhance capability, inclusion, and customer experience in the lead-up to the Brisbane 2032 Games.

1. Build infrastructure and capability. Developing data infrastructure such as data centres and secure databases will be essential to support scalable AI operations as well as foster trust. Innovation Hubs and mentorship programs can provide SMEs and farmers with spaces to trial AI tools under expert guidance. Training and upskilling programs are needed to equip SMEs and regional councils well ahead of 2032.

2. Embed ethical, transparent and responsible AI. An ethical AI framework should be implemented to ensure transparency, explainability, and appropriate human oversight. Clear guidelines are required for bias management, data privacy, and responsible personalisation. These measures help ensure that AI supports rather than replaces human decision-making. It is crucial that customers feel that they, rather than the algorithms, remain in control.

3. Adopt a customer-centric strategy in AI-enabled marketing and communication. AI-enabled experiences should be grounded in customer needs, diversity, and inclusion. For instance, customer perceptions differ across generations, hence early engagement with Gen Z and Gen Alpha will be vital for designing strategies that foster long-term trust, while leveraging AI-engagement in such a way as to help bridge digital literacy divides and enhance participation across communities.

4. Balance automation with human connection. As highlighted, there is a persistent tension between automation and human interaction. While AI will be pivotal in advancing automation, retaining meaningful human interaction, where appropriate, will be vital to ensuring authenticity as operations scale. Aligning with the expectation that technology should support, not substitute, human connection.

5. Communicate impacts to local communities. It will be important to ensure communities understand how leveraging AI and other related initiatives contribute to local benefits, expectations, and outcomes associated with the Games.

6. Leverage customised LLMs and digital twins to enhance the Games experience. Employ customised LLMs to enhance the experience by synthesising fan and/or athlete queries and sentiment, operational data and sponsor activity into real-time reports that flag emerging risks, equipping organisers and partners with evidence-based insights to assist decision making. AR and VR-enabled digital twins offer opportunities for provenance storytelling, sustainability gamification, and interactive engagement during lull moments. For instance, interactive menus can further provide transparent information on provenance, dietaries, and meal narratives. Importantly, keep in mind that international visitors want to experience Australian culture and Australia during their experience.

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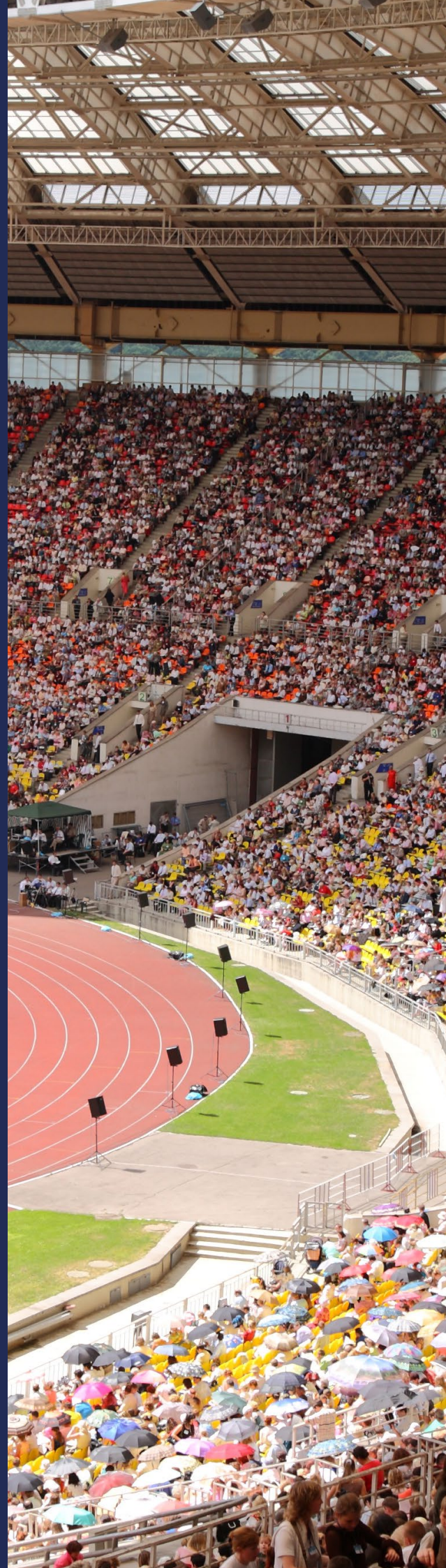
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Pictured (left to right): Gail Macleod, Joel Andrade, Claudia Lordao and Melissa Witheriff



Chapter 8

Logistics, policy,
and food waste
management



Leads: Simon Lockrey and Nathan Cook

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Introduction

Australia generates approximately 7.6 million tonnes of food waste every year, costing the economy \$36.6 billion and contributing to around 17.5 million tonnes of CO₂-equivalent greenhouse gas emissions annually (FIAL, 2021). As a part of these emissions, food rotting in landfills produces methane, a greenhouse gas that is 28 times more potent than CO₂ in terms of its global warming potential (EFWA, 2025; FAO, 2022).

Food production and consumption are major contributors to waste across the supply chain, from farm to fork. Inefficiencies in transportation, storage, and distribution—combined with a misalignment between supply and demand and rigid retail standards—often lead to spoilage and overstocking, resulting in edible food being discarded before it reaches consumers (Foodbank Australia, n.d.; WWF-Australia, 2025).

Mega-events such as the Olympic and Paralympic Games are celebrated for their magnitude, international participation, and cultural significance. To cater for this, major food service operations are required. Thus, behind the scenes,

substantial amounts of food waste are generated, raising concerns about sustainability and resource management (Zafari et al., 2025; Sharma et al., 2024). The Brisbane 2032 Olympic and Paralympic Games offer Australia a transformative opportunity to redefine sustainability through the lens of food logistics, waste management, and circular economy practices (Queensland Government, 2021). Effective strategies for sustainable food procurement, distribution, and waste recovery will be critical to balancing economic growth, social equity, and environmental responsibility in relation to these events (Queensland Government, 2021).

This section of the White Paper synthesises insights from the FaBA “Feeding the Brisbane 2032 Games” roundtable discussions on logistics and food waste. It aims to identify key challenges and corresponding opportunities to explore the logistical, policy-based, and cultural dimensions of sustainable food governance that helps supply food whilst minimising waste for large-scale sporting events like the Brisbane 2032 Olympic and Paralympic Games (the Games).

Challenges

Southeast Queensland infrastructure faces complex challenges related to both food supply and waste management, especially in the context of large-scale events like the Games. The existing road networks are unlikely to meet the combined demands of freight transport, hospitality logistics, and passenger travel, potentially leading to significant congestion (Engineering Australia, 2021). In addition to transport, there is a need for dedicated infrastructure to ensure reliable food supply and distribution during the Games and beyond. This includes systems for storing, preparing, and serving food efficiently and sustainably.

Reverse supply chain

Equally important is the infrastructure for managing food waste. If waste cannot be prevented, facilities must be in place to process it responsibly. Appropriate diversion of the inevitable mass amounts of organic food waste (and to some extent food packaging) from landfill must be considered. Designing clear waste collection and segregation opportunity to increase the capacity for multiple waste destinations is imperative and could be a combination of refeeding humans or animals, upcycling waste to new products, and composting or converting waste to energy (USEPA, 2023).

Traditional food service models—often operated by large multinational providers—are typically built on standardised, centralised systems

that prioritise efficiency and cost control over sustainability, which can lead to higher levels of food waste and limited flexibility for circular practices (Jia & Ma, 2022; Martin-Rios et al., 2022). These models should be reconsidered during planning to prevent and reduce food waste to support circular practices. This could include using data driven planning, reusable crockery and cutlery and designing food services that minimise excess and promote local sourcing.

Research on similar events, including the Paris 2024 and Tokyo 2020 Games, highlights the importance of early infrastructure investment in transportation and waste management to prevent strain on local economies and food supply chains (Kato et al., 2020; Lefort, 2024). Additionally, planning for waste processing infrastructure—including composting units, anaerobic digestion systems, and recycling stations—ensures that unavoidable waste is handled sustainably. Ultimately instilling a philosophy of food service waste reduction (rather than waste management), will alleviate the need for excessive waste infrastructure/services.

Climate change

Climate events further complicate the logistical concerns. Climate change is increasingly destabilising food logistics by disrupting agricultural production through extreme weather events, altered precipitation patterns, and rising temperatures, which reduce crop yields and quality and drive-up costs across the supply chain (Oriekhoe et al., 2024). Such

disruptions amplify economic volatility, affecting input prices, transportation, and storage, while creating cascading risks for food security and affordability.

“Around 60% of Southeast Queensland’s food supply depends on fresh produce transported from regions five to twenty hours away—areas themselves highly vulnerable to flooding, cyclones, and drought.”

Daniel Pennisi, National Sales Manager, Beemart

These vulnerabilities pose significant risks to maintaining consistent supply for large-scale events that demand food volumes beyond normal levels. Food warehousing infrastructure in Southeast Queensland is also vulnerable to the risk of flooding from extreme rainfall events, as experienced in previous years (Smith et al., 2016).

Social equity

Addressing the social equity challenges is key to ensuring fair food access during the Games. Household food insecurity in Australia has worsened since the COVID-19 pandemic, driven by inflation and uneven wage growth (Foodbank Australia, 2024; The Salvation Army, n.d.). As Brisbane prepares for the influx of potentially millions of visitors (International Olympic Committee, 2024a), it is critical to ensure that both local communities and international guests have access to affordable, culturally appropriate, and nutritious food. Outcomes from the recently submitted National Food Security

Discussion Paper will drive an agenda to ensure “Feeding Australia” is possible by the time the Games arrive (DAFF, 2025).

Cuisine diversity

One major challenge is the diversity of dietary preferences among visitors, alongside the strict nutritional requirements of athletes. Further complications arise when host cities aim to showcase their local foods (e.g. mangoes, macadamias) that are out of season during the Games. Standardising food offerings to streamline logistics can inadvertently lead to increased food waste if meals fail to meet the varied needs of athletes and tourists.

At the Paris 2024 Games, certain foods were not provided by organisers due to environmental impacts and the lack of local supply (Bouhier, 2024; TOSC, 2022). This created a paradox between sustainability-driven actions and the need to maintain athletes’ established diets just weeks before the most important competition of their careers. To address this, the Australian Olympic Committee (AOC) set up a dedicated “home pantry” for its athletes, importing familiar items such as coffee, muesli bars, tuna, avocados and pies to ensure comfort and support performance (Decent, 2024). This example highlights the complexity of catering to rigid dietary needs and preferences within a global event (Kaur, 2024).

These issues underscore the importance of flexible and inclusive food planning that accounts for

cultural diversity, dietary needs, and sustainability goals. Without thoughtful coordination, poor planning can exacerbate environmental impacts, local inequalities and strain food systems, as was evident during the Rio 2016 Games (Montag, 2023).

Opportunities

While challenges loom large, the Games present a unique opportunity to catalyse systemic change by improving logistical practices, advancing food circularity and accelerating the adoption of sustainability strategies (Pelly et al., 2023). We elaborate on these next.

Connectivity geographical/operational

Investing in infrastructure is vital to ensure the Games run smoothly and leave a long-lasting legacy for Australia. Beyond public transport and venues, a critical component is the logistics network for food distribution. Efficient systems for moving food (i.e. both in and out) across venues, athlete villages, and hospitality zones will be essential to meet the demands of thousands of athletes and potentially millions of spectators (International Olympic Committee, 2024b). This includes cold chain logistics, new transport routes or hubs (i.e. road, rail, ports, etc), storage and warehousing, local sourcing, and sustainable delivery methods (i.e. low carbon transport modes), offering a unique opportunity to showcase Queensland's and Australia's agricultural strengths and innovation in supply chain management.

Among the infrastructure priorities, sustainable development of road systems has been discussed to reduce congestion and emissions (Guo et al., 2022). Importantly, infrastructure investments do not need to rely solely on new builds. Reinforcing and upgrading existing assets can deliver significant benefits without putting pressure on the environment or consuming valuable green space.

This investment also aligns with recent national calls to treat food and logistics systems as critical to national security, as outlined in recent green and white papers (DAFF, 2012; DAFF, 2025). Strengthening these systems for the Games can serve as a catalyst for long-term resilience, preparedness, and strategic capability across Australia's food supply chain. This approach supports both the success of the Games and long-term national development goals.

Cultural

Logistics is not only about moving goods efficiently across geographical spaces—it also plays a powerful role in enabling cultural connectivity. By enabling the timely and coordinated distribution of diverse foods, while minimising waste, logistics can help bring different cultures into closer contact, especially during global events like the Games. A well-designed logistics system can foster cultural exchange, inclusivity, and mutual understanding, by way of access to a range of foods from different cultural origins. Thus, it can become a bridge not only between places but also between people, traditions, and values, making

infrastructure a key enabler of cultural dialogue as well as economic success. Social marketing would likely be required at the point of food consumption to truly take advantage of this, rather than solely relying on the supply of culturally diverse food.

Collaborative

Connectivity should also occur between small and large corporations, with food logistics as a valuable opportunity to minimise waste and amplify shared value. By fostering collaborative supply chain models—such as shared distribution networks that are data driven, regional food hubs, surplus recovery programs, and co-branded sustainability initiatives—businesses of all sizes can contribute to a more circular economy. Co-designed approaches can broker these partnerships by actively involving diverse stakeholders in shaping inclusive, context-sensitive logistics solutions.

This participatory method ensures that both small producers and large corporations co-create systems that reflect mutual goals, capacities, and values (Willmott et al., 2024). It not only reduces inefficiencies and environmental impact but also enables smaller producers to gain visibility and market access through strategic partnerships (Food Connect Foundation, 2025). For larger corporations, it offers a chance to enhance Environmental, Social, and Governance (ESG) performance and brand reputation by supporting local suppliers and community-driven solutions. Overlaying branding with

purpose-driven logistics can turn operational efficiency into a platform for cultural storytelling, inclusivity, and long-term consumer trust (Pillai & Ramakrishnan, 2024).

There is an opportunity now, before the Games, to shift consumer culture towards more sustainable behaviours. Trialling and testing circular economy initiatives within Southeast Queensland and at large sporting events (i.e. AFL and NRL games) can support our understanding of how these could translate into the real-life scenario of 2032. Delivering these initiatives successfully at the Games can act as a major catalyst to demonstrate sustainable behaviour change in our community on the world stage. The evaluation of their delivery to then improve and implement widely can support a cultural change that lasts beyond the Games, such as appropriate household waste separation, reduction and prevention.

Technical innovation cold chain

Modernising the cold chain logistics sector with advanced technologies presents a significant opportunity for Australia to strengthen its supply chain resilience ahead of the Games. Innovations in temperature-controlled transport, real-time tracking, and data-driven planning/inventory management can reduce food waste and improve efficiency across venues and hospitality zones. Equally important is the need to revisit contractual frameworks between key players in food distribution, raising a critical question: who ultimately bears the cost of wasted food? The

answer is often everyone, including the community, producers, and the environment. Addressing this issue opens the door for more equitable and transparent discussions across the supply chain, then leading to more sustainable practices (Queensland Government, 2025a).

Reuse

Australia is the second-highest generator of single-use plastic waste per person globally, with an estimated 140,000 tonnes leaking into our environment each year (WWF-Australia, 2025). Reuse systems offer a powerful opportunity to change this statistic and demonstrate global leadership in sustainability. Mega events like the Games present a valuable opportunity to transition to reusable systems that can significantly reduce waste and enhance sustainability. However, achieving this requires a staged transition plan—beginning now with smaller sporting events, scaling to stadium-sized competitions, then multi-day festivals, and finally the Games. Organisations such as the Australian Packaging Covenant Organisation (APCO) could play a pivotal role in coordinating this roadmap.

“Only sustainable or recyclable packaging should be used for any products entering the Games areas.”

**Professor Pierre Pienaar, Director,
Australasian Institute of Packaging**

From packaging and food service containers, cutlery and crockery to transport pallets and modular venue

components, integrating reusable solutions can lower environmental impact while improving operational efficiency. To broker these innovations effectively, co-design approaches—involving suppliers, caterers, food businesses, consumers, venue managers, and government stakeholders—are essential. Such collaborative planning fosters shared responsibility and ensures that solutions align with circular economy principles. For example, returnable drink containers and compostable food ware proved effective during the Tokyo 2020 Olympics and were pre-modelled as part of the sustainability strategy for Paris 2024 (International Olympic Committee, 2023).

Investment clarity

Innovation often requires targeted investment, and such investment can only occur when clear and supportive policies are in place (McColl-Kennedy, et al., 2025). Recent ESG regulations, now mandated by many companies, are creating strong momentum for aligning infrastructure and supply chain investments with sustainability goals (Montag, 2023). To unlock the full potential of these innovations, infrastructure development must be linked to well-defined, enforceable legislation that provides clarity, accountability, and long-term value. This approach not only supports responsible resource use but also reinforces Australia's leadership in sustainable event planning, innovation and logistics transformation.

Governance and policy integration

The Queensland Government's updated Procurement Policy set a 30% procurement target for small and medium enterprises (SMEs) and maintains commitments to purposeful public procurement, which includes supporting local suppliers and indigenous business engagement (Queensland Government, 2026). Complementing this, the Draft Queensland Waste Strategy 2025–2030 outlines ambitious goals to reduce landfill, boost recycling, and transition toward a circular economy (Queensland Government, 2025b). At the national level, the 2024 National Waste Policy Action Plan outlines seven key targets to guide Australia's transition to a circular economy. These include reducing total waste generation by 10% per person by 2030, achieving an 80% average resource recovery rate, and halving organic waste sent to landfill (Australian Government, 2024). Policy alignment to these mechanisms will be essential to realising the Games' sustainability vision.

Ongoing legacy and sustainability

Co-designing a Regional Food Procurement Strategy project highlights the necessity of collaboration between university experts, industry, and government to ensure a coherent governance framework (Smith et al., 2026). Comprehensive contracts for food procurement and service provision should be formalised early to prevent last-minute disruptions, as illustrated by the need to move 1.7 tons of additional animal protein almost

overnight during the Paris Games (Noack, 2024).

These initiatives should be guided by the principles of shared power, circularity, and inclusivity. Co-designed processes—where government, industry, and community stakeholders collaboratively shape approaches and solutions—are essential to brokering fair and effective outcomes. Sustainable outcome-based contracts must balance the operational capacity of multinationals with opportunities for smaller regional suppliers. Moreover, socio-economic inclusivity must remain a guiding principle, ensuring that local workers, including hospitality and foodservice staff, are supported with fair wages and training opportunities.

Effective governance is not only about compliance but also cultural leadership. As research highlights, behavioural design, inclusive communication, and early education campaigns can engender shared commitment across stakeholders (Pelly et al., 2023). Legislation should also be forward-looking—embedding principles of circular design, policy longevity, and operational resilience for decades beyond 2032.

Education

Education and public awareness initiatives are additional levers for change to align with long-term behavioural change goals. “The Great Unwaste” campaign being delivered through a combined Australian industry, governmental, and NGO based partnership under

the auspice of End Food Waste Australia, already demonstrates the value of education in shaping positive community household habits regarding waste segregation and food value perception (Viscardi et al., 2023). In partnership with campaigns like “The Great Unwaste,” the Games may be able to engage local and visiting communities on circularity and waste prevention at the events.

Integrating food science, nutrition, and sustainability into Queensland school curricula is an additional strategy which may also support behaviour change in future community engagement activities that are heavily attended such as

the Games. Promoting public health as the core message aligns with the issues discussed above in this chapter including transport, culture, food choice, waste behaviours and food security.

Conclusion

By implementing the recommendations proposed in this chapter, Brisbane 2032 can deliver an exceptional fan experience while establishing a meaningful legacy that benefits local communities, supports public health goals, and showcases Queensland's unique food culture to the world.

Pictured (left to right): Dr Nathan Cook, Daniel Pennisi, Dr Giorgio La Fata, Jean-Francois Roiron



Recommendations for policy and practice

Based on the synthesis of roundtable evidence above and relevant literature, seven recommendations emerge.

1. **Strengthen supply chain resilience.** Invest in climate-resilient infrastructure and diversify sourcing regions to prevent future disruptions.

2. **Embed circular economy principles.** Institutionalise prevention strategies, reusable systems and develop waste-to-resource pathways, such as upcycling market activation, and biofuel production from organic waste.

3. **Coordinate multi-level policy.** Harmonise local government, state, and national food, infrastructure, and waste strategies under one Olympic sustainability framework.

4. **Support farmers and food producers.** Make sure companies of all sizes, from farm to retail are provided the agency and opportunity to participate in the Games, through associated funding, policy, partnership models, and procurement.

5. **Implement predictive modelling and data analytics.** Employ data-driven forecasting to optimise procurement, enhance cross organisational collaboration, improve cold chains, and reduce logistics inefficiencies.

6. **Promote food literacy and cultural diversity.** Expand educational campaigns and culinary inclusivity, along with tools and behavioural infrastructure, to showcase Queensland's multicultural identity and approach to multi-faceted sustainability in order to drive the best chance of a vibrant, inclusive, efficient and circular Games.

7. **Foster collaboration across industry.** Encourage active collaboration between small/ medium enterprise (SMEs), large businesses, all government levels, and the broader community via co-design. Without this collective effort, many of the critical needs in this area will remain unmet. Building strong partnerships ensures shared understanding, resource alignment, long-term impact, sustainability requirements, and compliance frameworks aligned with public health objectives.

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4

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