Feasibility and Societal Impact of the Mobile Teaching Kitchen Initiative (MTKi) Proof of Concept in Scotland

# Authors:

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# **Background:**

The Mobile Teaching Kitchen Initiative (MTKi) was developed to address pressing public health concerns related to poor dietary habits and limited nutritional awareness within underserved communities. As a mobile, community-based intervention, MTKi combines nutrition education, hands-on culinary training, and micro-entrepreneurship opportunities to empower participants as leaders in their communities. By building skills in food preparation, budgeting, and health literacy, MTKi fosters positive dietary changes, local leadership, and sustainable food practices. This evaluation of the adaptable model's recent Phase 2 operations in Dundee highlights a focus on community engagement and developing "champions" to lead local health and wellness efforts.

# **Objectives:**

To evaluate the impact of MTKi on participants' nutrition knowledge, dietary attitudes, and food practices, while fostering self-sufficiency through culinary and microenterprise training.

### Methods:

Over six months (February-July 2024), 70 participants engaged in culinary nutrition education sessions featuring diverse cultural cuisines (South Asian, Mediterranean, and Scottish), using customized menu templates. Participants completed KAP and FACET surveys to assess knowledge, attitudes, practices, and dietary behaviors. Community outreach was extended through a public culinary demonstration at the Dundee Food Festival, providing a platform for participant engagement and feedback.

### **Results:**

Survey findings indicated a 12.3% improvement in nutrition knowledge and a modest 1.9% increase in positive dietary attitudes, though practice changes were limited, highlighting barriers to behavior change. The MTKi model successfully developed five champions skilled in nutrition, cooking, and micro-entrepreneurship, creating a network of community leaders. Positive community reception and substantial media coverage at the Dundee Food Festival underscored the MTKi's societal impact and potential for scalability.

### **Conclusion:**

The MTKi model is feasible, adaptable, and impactful in UK contexts, engaging communities in sustainable nutrition education. Continued funding is crucial for scaling MTKi to enhance community resilience, address malnutrition, and support economic empowerment in marginalized groups. Further research should explore extended interventions to reinforce sustainable dietary practices.