Title: The Dairy and Fracture Project: A Research Translation Challenge

International Federation of Ageing Conference
Dr Amee Morgans
Hyderabad June 2014
In Australia, people aged over 65 are eligible for government funded aged care services.
These can be provided in the person's home, or in a residential aged care facility setting.
Nutrition is a cornerstone of care in the residential aged care setting.
Dairy Project - Background

Project Funding: multiple sources of competitive grant funding, including Dairy Australia

Project Activities: The Dairy and Fracture Project is a multi-phase, collaborative, research project that assessed the benefits of additional dairy products on nutrient intakes, malnutrition, fracture risk, health and quality of life in aged-care recipients living in residential aged care facilities in Victoria Australia.

- Participants: Benetas is a large not-for-profit aged care service provider in Victoria Australia. Benetas has 4000 clients, 1400 staff and 400 volunteers. One quarter of Benetas clients reside within Benetas 13 facilities.
- 130 residents participated (78% female, mean age 86.5 years).
Nutrition Study Methods

Methods:

- The project was a prospective intervention and involved the provision of two additional dairy products into the resident’s diet so they achieved the recommended four serves of dairy per day.

- Two intervention and two control low-level aged-care facilities in Melbourne, Australia were selected to pilot the intervention. Residents at intervention facilities were provided with 2 additional dairy serves daily over a 4-week menu cycle, while control facilities consumed from their usual menu.
Dairy Project - Results

- Residents in intervention facilities significantly increased their mean daily intakes of energy and protein, both of which achieved recommended intake levels, and proportion of energy from protein, while the proportion of energy from fat decreased.

- Significant increases in mean daily micronutrient intakes were observed for calcium, vitamin D and zinc, which remained unchanged in control residents.

- Residents had less fractures and falls in the intervention group, however this was not statistically significant due to small sample size. This is being investigated in Phase 2 of the project across 60 Residential aged care facilities. Phase 2 also includes bone density scanning.
Dairy Project - Implementation Challenge

- This research demonstrates that two additional serves of dairy food can significantly improve nutrient intake in aged-care residents and its ease of provision makes it a viable option to potentially prevent malnutrition

- Within three months of the cessation of the trial, the dairy diet had ceased at all participating facilities.

- Barriers to the ongoing implementation of this initiative were investigated

- A systematic approach was incorporated to overcome these barriers
Analysis of Implementation barriers

Industry level factors:
Funding, state and federal government policy, legislation

Organisation Level factors:
Catchment area, staff ratios, organisational policies, funding structures, organisational culture, attraction/retention

Site Level factors:
Staff ratios and skill-mix, facility size, management, site culture, geographical factors, referral pathways, health resource access

Individual factors:
Client preferences, client acuity, family members, personal wealth resources, staff preferences, staff skills, geography
Implementation Strategies

- **System**
  - policy development and lobbying for standards and nutrition funding - evidence based argument

- **Organisation level:**
  - recipe repository,
  - staff retention focus, chef position created
  - cultural change to include nutrition as part of medical care

- **Site Level**
  - increased communication with kitchen staff, menu resource access, increased labour

- **Client Level**
  - sourcing recipes from clients and families
  - Balance between nutrition and personal choice
Summary

- Lesson learned - research translation is not simple, even when positive and evidence based
- Barriers at multiple layers, most solutions local
- Operational staff engagement and continuity is the key to actual change
Thankyou 😊

Contact Details:
Dr Amee Morgans
Amee.Morgans@benetas.com.au