

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

International Federation of Ageing Conference Dr Amee Morgans Hyderabad June 2014

## Dairy Project - Background

- →In Australia, people aged over 65 are eligible for government funded aged care services.
- ◆These can be provided in the persons 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 multiphase, 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.
- o 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
  - o Iuliano, Woods, Robbins (2013) Consuming two additional service of dairy food a day significantly improves energy and nutrient intakes in ambulatory aged care residents: A feasibility study. *The Journal of Nutrition, Health and Ageing, 17(6)pp 509-513.*
  - 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

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## Implementation Strategies

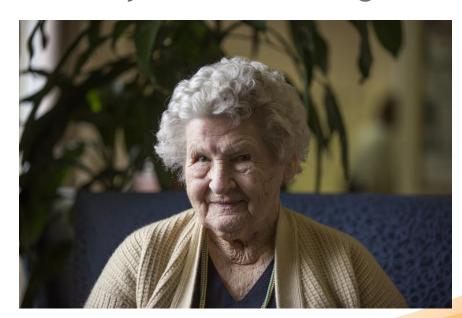
#### + System

- 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, menuresource 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 ©





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