

Encouraging Best Practice Nutrition and Hydration in Residential Aged Care

Appendix 1: Food Service Satisfaction Survey

[Facility Name] RESIDENT FOOD SURVEY

Implementing Best Practice Nutrition and Hydration in Residential Aged Care

(Professors Julie Byles and Sandra Capra)

Resident Food Service Satisfaction Survey

Version 1; Dated 7/08/2008

This survey asks about **your views of food service** in this facility. This is part of a project which is looking at food and nutrition at [Facility Name]. All your answers will be anonymous. You can leave blank any question you don't want to answer.

For each statement, please answer how often you feel this way:

Always, Often, Sometimes, Rarely, or Never

Please mark your answer by circling it, for example:

1. I receive enough food **Always** **Often** **Sometimes** **Rarely** **Never**

The Questions start on the next page.

There are 27 questions, and a place to write comments if you want to.

HUNGER & FOOD QUANTITY					
1. I receive enough food	Always	Often	Sometimes	Rarely	Never
2. I still feel hungry after my meal	Always	Often	Sometimes	Rarely	Never
3. I feel hungry in between meals	Always	Often	Sometimes	Rarely	Never
MY CHOICES					
4. I am asked about the food and drink that I like	Always	Often	Sometimes	Rarely	Never
5. I am able to choose where I sit to eat my meal	Always	Often	Sometimes	Rarely	Never
6. I like the amount of food choice I have	Always	Often	Sometimes	Rarely	Never
7. I can add salt, pepper and sauces to my food if I want	Always	Often	Sometimes	Rarely	Never
8. There is enough variety for me to choose meals that I want to eat	Always	Often	Sometimes	Rarely	Never
9. I can have a snack (eg sandwich / toast) whenever I choose	Always	Often	Sometimes	Rarely	Never
MEAL QUALITY & ENJOYMENT					
10. The meals taste nice	Always	Often	Sometimes	Rarely	Never
11. The meals have excellent and distinct flavours	Always	Often	Sometimes	Rarely	Never
12. I like the way the vegetables are cooked	Always	Often	Sometimes	Rarely	Never
13. The meat is tough and dry	Always	Often	Sometimes	Rarely	Never
14. The food is as good as I expected	Always	Often	Sometimes	Rarely	Never
15. I really enjoy eating my meals	Always	Often	Sometimes	Rarely	Never
16. I like the way my meals are presented	Always	Often	Sometimes	Rarely	Never

17. The vegetables are too crisp	Always	Often	Sometimes	Rarely	Never
18. The hot foods are just the right temperature	Always	Often	Sometimes	Rarely	Never
19. I am able to choose the portion size of my meal	Always	Often	Sometimes	Rarely	Never
20. The vegetables are too soft	Always	Often	Sometimes	Rarely	Never
THE DINING ROOM					
21. I like the atmosphere in the dining room at mealtimes	Always	Often	Sometimes	Rarely	Never
22. The crockery and cutlery are chipped and/or stained	Always	Often	Sometimes	Rarely	Never
23. I am disturbed by noise in the dining area	Always	Often	Sometimes	Rarely	Never
24. The staff who serve my meals are neat and clean	Always	Often	Sometimes	Rarely	Never
25. The cutlery and dining aids that I am given help me to manage everything on my plate	Always	Often	Sometimes	Rarely	Never
26. The main meals are served at times that are good for me	Always	Often	Sometimes	Rarely	Never
27. Overall, how would you rate the foodservice	Very good	Good	Not good or bad	Poor	Very poor

**Do you have any general comments or suggestions?
Please write them below.**

THANK YOU VERY MUCH FOR YOUR TIME

Encouraging Best Practice Nutrition and Hydration in Residential Aged Care

Appendix 2: Activity Timelines for Each Facility

123F Timeline									
Month	1	2	3	4	5	6	7	8	9
Ax			A1			A2		A3	
Meetings	Start-up		NM1	NM2	NM3		NM4	NM5	
Feedback			Interview findings	A1, plate waste 1			A2	A3	
Activities				Research into pathway addressing behaviours of concern including a nutrition component. 3-month trial planned in DSU.					
External Events / Challenges to or Facilitators of Project Progress	Manager covers 2 facilities	Accreditation		RN case management introduced					
			Ongoing review of facility systems and staff education (including nutrition) Ongoing staff shortages – reliance on agency staff						
Month	1	2	3	4	5	6	7	8	9

197D Timeline										
Month	1	2	3	4	5	6	7	8	9	10
Ax		A1			A2				A3	
Meetings	Start-up		NM1	NM2	NM3	NM4	NM5		NM6	
Feedback			Interview findings		A1					
Activities				Food record charts collected (total dietary intake over 2 days)		Ulna length measured for a small group of residents by staff	MUST completed for a small group of residents	Flowchart trialled with 5 residents	Staff training re MUST and flowchart	
					Action plan (dietary supplement items) / flowchart and weight chart developed		Weight chart trialled		Square plates sourced to identify residents whose food intake needs attention	
External Events / Challenges to or Facilitators of Project Progress				Clinical care manager resigns			New clinical care manager appointed Organisation released new nutrition screening protocol Difficulty obtaining Lufkin tape			
Month	1	2	3	4	5	6	7	8	9	10

242G Timeline										
Month	1	2	3	4	5	6	7	8	9	10
Ax		A1			A2			A3		
Meetings	Start-up		NM1	NM2	NM3	NM4			NM5	
Feedback			Interview findings	MUST scores	MUST scores					
Activities			Purchase of chair scale	Ulna length measured for project participants by champion	Ulna length used to calculate MUST scores and compared with dietitians' scores Weight chart developed Flowchart developed	Supplement record sheet developed and located with medication charts Supplements include Mars and chips			Use of Resource supplement (some snacks deemed inappropriate) Staff education re coeliac disease delivered	
External Events / Challenges to or Facilitators of Project Progress						Organisation released new nutrition screening protocol			Some staff poor at recording supplement distribution RN not notified of residents losing weight	
Month	1	2	3	4	5	6	7	8	9	10

386G Timeline									
Month	1	2	3	4	5	6	7	8	9
Ax		A1			A2		A3		
Meetings	Start-up	NM1		NM2	NM3	NM4	NM5		
Feedback		Interview findings		A1	Plate waste 1	A2			A3
Activities		New menu implemented (2 hot options evening meal)			Consideration of puree food moulds (facility visit) Red plates purchased to identify residents whose food intake needs attention	Poster promoting moulded puree meals displayed Red plates exchanged – did not fit existing plate covers	Puree moulds trialled with 2 residents		
External Events / Challenges to or Facilitators of Project Progress		Accreditation				Champion 1 on leave throughout month	Champion 2 on leave throughout month	Care manager on leave throughout month	
		Champions work night shift							
Month	1	2	3	4	5	6	7	8	9

452D Timeline									
Month	1	2	3	4	5	6	7	8	9
Ax		A1				A2		A3	
Meetings	Start-up	NM1		NM2	NM3	NM4	NM5	NM6	
Feedback		Interview findings			A1	A2, plate waste 1	Food survey	A3	
Activities				<p>Bain-marie installed in DSU</p> <p>China replaces melamine crockery in DSU</p> <p>“Breakfast club” (2 meal sittings) raised at residents’ meeting</p>	<p>Menu changes implemented (additional egg dishes)</p> <p>Communications book introduced for feedback to kitchen from residents</p> <p>No demand for “Breakfast club” – idea abandoned</p> <p>Insulated soup mugs purchased</p> <p>Staff and resident meetings re changes</p>	<p>Blue plates purchased for visually impaired residents</p> <p>Development of snack program</p>	<p>Development of snack program</p>	<p>Snack program implemented (n=12)</p>	
External Events / Challenges to or Facilitators of Project Progress						A second champion is now working on the project	<p>Accreditation Care manager on leave – snack program delayed</p> <p>Audit 1 still being completed by champions</p>		
		Champion works afternoon or night shift							
Month	1	2	3	4	5	6	7	8	9

519A Timeline											
Month	1	2	3	4	5	6	7	8	9	10	11
Ax		A1			A2		A3				
Meetings	Start-up		NM1	NM2		NM3	NM4				
Feedback			Interview findings								
Activities				Plan taste-testing session and contact catering company	Cost bread makers, knives, toasters etc and space availability for these items Taste-testing session and evaluation	Meals in recipe book included with list of afternoon meal options Resident and family evening meal preferences sought Kitchen liaise with catering company re menu options	3 bread makers, electric knives and large toasters purchased for hostel Staff meeting re above purchases Inclusion of new fresh-cooked items on menu Rostering patterns in kitchen evaluated Identified local provider re education in food preparation				
External Events / Challenges to or Facilitators of Project Progress							Lack of knowledge of catering company representative re products. Requires 1 weeks' notice when ordering (2 week trial of new menu yet to be undertaken)				Extension of hostel to be completed
Month	1	2	3	4	5	6	7	8	9	10	11

696A Timeline									
Month	1	2	3	4	5	6	7	8	9
Ax	A1		A2			A2b			A3
Meetings	Start-up	NM1		NM2	NM3		NM4	NM5	NM6
Feedback		Interview findings		A1 and A2			A2b, plate waste 1, food survey		A3
Activities				MUST trialled, developing paperwork to enable action plans etc to be recorded	Consideration of puree food moulds (facility visit). Catering staff only – numbers limited by salmonella outbreak	Experiment with puree moulds to determine feasibility etc		All residents screened using MUST, revised weight chart in use Staff education re weight chart Puree moulds trialled with 2 residents with good results Puree moulds ordered	Weight chart integrated into practice
External Events / Challenges to or Facilitators of Project Progress	Project suspended until new manager appointed				Salmonella outbreak			Champion on leave throughout month Difficulty obtaining Lufkin tape	Awaiting arrival of moulds from the US
Month	1	2	3	4	5	6	7	8	9

764E Timeline										
Month	1	2	3	4	5	6	7	8	9	10
Ax	A1			A2		A2b				A3
Meetings	Start-up 2 months prior NM1	NM2		NM3		NM4		NM5		NM6
Feedback	Interview findings									
Activities		Some cook-fresh options introduced	Lifter weighing device purchased and weighing routines reviewed Regular weights and BMIs Review of supplements	Cook-chill process video recorded Identified examples of good and bad meals from catering committee minutes and plate waste		Proposed changes to kitchen rosters (from 4 to 5 days/week)		Staff members have attended Cert III course in hospitality Review of different options to maintain food temperatures (e.g. heated trolleys) Consideration of puree food moulds (facility visit)		New menu implemented – 2 hot options main meals, hot breakfast options reduced to twice/week
External Events / Challenges to or Facilitators of Project Progress	Manager on leave	Catering manager on 6 month sabbatical				Catering manager returns and resigns Flu outbreak – lockdown in NH and DSU		Kitchen recently renovated – unable to incorporate volume of puree meals		Catering manager position advertised
	Ongoing renovations at facility									
Month	1	2	3	4	5	6	7	8	9	10

834E Timeline									
Month	1	2	3	4	5	6	7	8	9
Ax			A1			A2		A3	
Meetings	Start-up		NM1	NM2	NM3	NM4	NM5, NM6		NM7
Feedback			Interview findings			A1, food survey (used for accreditation)	A2 (NM5), plate waste 1 (NM6)		A3
Activities				Staff meetings re DSU program DSU program preparation Computer program of weight chart developed Conduct food survey Changed food supplier	Staff meetings re DSU program "mandatory training" DSU program starts	Dining room changes implemented Computer program implemented	DSU program suspended		"Pamper day" implemented DSU program recommenced
External Events / Challenges to or Facilitators of Project Progress						Accreditation Full capacity but now understaffed (had major bed vacancies in the past)	Flu outbreak – DSU program suspended		New staff recruited and undergoing training
Month	1	2	3	4	5	6	7	8	9

Encouraging Best Practice Nutrition and Hydration in Residential Aged Care

Appendix 3: Summary of Facility Practice Development Plans

Guidelines/evidence base	Objectives	Actions
<p>Resident likes and dislikes need to be established, documented and reviewed every 3-6 months.</p> <p>A system should be in place so that all staff are aware of resident food and eating issues.</p>	<p>To canvass resident preferences for teatime meal choices.</p> <p>To process map the progress of examples of well-received and less preferred meals from initial preparation through to presentation to the resident.</p> <p>To identify key characteristics of well-received and less preferred meals in both hostel and nursing home.</p>	<p>Survey / consult with residents over evening / teatime meal preferences.</p> <p>Taste test options from the current food retail provider to enable residents to identify meal option preferences.</p> <p>Identify appropriate meals and menu items for detailed study using: minutes of the Catering Committee, menu requests, plate wastage records.</p> <p>Taste-test demonstration of moulded puree meals.</p>
<p>A menu plan should ensure continued food quality and variety.</p>	<p>To access and provide a wider variety of menu items for the teatime meal, in line with resident preferences.</p> <p>To review the menu and develop menu plans tailored to preferences of residents living with dementia who exhibit disruptive behaviours.</p>	<p>Identify a list of quick and easy meals, and a feasible work plan for their preparation including resource requirements, to enhance teatime meal choices.</p> <p>Create new menu cycle.</p> <p>Develop and pilot test new menu options and evaluate new menu plans for nutritional balance and adequacy.</p> <p>Utilise nutrient dense, easy to consume items ('finger foods') and eliminate items high in colourings and preservatives for residents with dementia.</p>
<p>Residents and/or family should be involved in menu planning, mealtimes, meal sizes and the use of utensils.</p>		<p>Introduction of a communications book to ensure feedback to the kitchens from residents for specific meals.</p>

<p>Menus and meals that are prepared away from the facility, e.g. central kitchens, will need to be frequently reviewed and evaluated in order to ensure resident preferences and needs are satisfactorily catered for.</p>		<p>Identify a range of options from the current food retail provider to enhance teatime meal choices.</p>
<p>Any menu will need to:</p> <ul style="list-style-type: none"> • Offer at least 2 choices for the main dish at each meal • Provide nutritionally acceptable alternatives for residents who dislike the first choice on the menu. 		<p>Cost and obtain breadmakers and other equipment; develop a workable plan to enable bread to be baked daily for residents, soups and other meals to be prepared freshly for residents' evening meals.</p>
<p>Any menu will need to:</p> <ul style="list-style-type: none"> • Be flexible enough to provide sufficient variety for those on texture modified diets. 	<p>To determine feasibility of implementation of moulded food preparation for puree diets.</p>	<p>Arrange a visit to Lottie Stewart to view processes entailed in implementation of moulded food preparation for puree diets.</p> <p>Obtain manual for food moulding.</p> <p>Liaise with catering staff regarding kitchen processes for food moulding and trial puree food moulds at the facility.</p> <p><i>Note: these activities were undertaken at 4 facilities.</i></p>
<p>When planning a menu, resources such as storage space, staff, equipment, food supplies and time should be considered along with budgeting and food ordering.</p>	<p>To develop an action plan to address process quality deficits.</p>	<p>Use video-recording to process map the progress of meals from initial preparation through to presentation to the resident.</p> <p>View video-recordings and identify key characteristics of well-received and less preferred meals in both hostel and nursing home.</p> <p>Develop an action plan to address process quality deficits.</p> <p>Source and purchase different coloured or shaped plates to enhance the dining experience and/or identify those residents whose food intake needs</p>

		<p>close attention.</p> <p>Source insulated soup mugs and bowls to ensure meals stay warm.</p> <p>Purchase equipment required for puree food moulds.</p>
<p>A comfortable dining environment and pleasant relaxed atmosphere can improve appetite and food enjoyment.</p>	<p>To review the dining experience of residents and develop a change strategy to enhance the dining experience of all residents.</p>	<p>Dining room re-organised and refurbished (e.g. use of round tables, new table cloths, music) to promote the dining experience.</p>
<p>While it is acknowledged that some residents will always need assistance, many will be able to eat with some degree of independence if provided with appropriate equipment and support.</p>		<p>Introduce easy to consume items ('finger foods') for residents with dementia.</p> <p>Source coloured plates for visually impaired residents.</p>
<p>A resident's food and nutritional needs should be determined on entry to an aged care facility and reviewed regularly.</p> <p>To determine if residents are getting enough food, monitor weight, plate waste and food intake.</p> <p>Weight loss is not a normal part of growing old. As people age it should not be considered normal or expected that weight loss occurs. Better health is achieved by maintaining weight or by being slightly overweight.</p>	<p>To use MUST screening tool; and to compare MUST scores with those from nutrition assessments to check reliability and inform training needs.</p> <p>To develop an easy and visually clear way of documenting monthly weights to facilitate identification of trends, whether of loss, gain, or no change.</p> <p>To develop and pilot test an algorithm / flow chart of action points / decision aid for each category of weight gain / loss / no change in light of residents' BMI category or nutritional risk score category; and</p> <p>To evaluate the usefulness and practicality of this tool, in light of changes indicated and achieved in staff nutritional practices and resident nutritional intake.</p> <p>To map menu choices of residents with amounts actually eaten, and review current meal and menu plans.</p>	<p>Trial MUST with a group of residents for whom nutrition assessments will be available, using ulna length and accurate weights, and report on ease of use as well as collection of scores. Review reports and scores; establish feasibility, practicality and desirability of using MUST plus action plan.</p> <p>Nutrition advisor to develop a draft algorithm / action plan / decision aid to indicate appropriate nutritional responses for residents for whom regular monthly weights demonstrate weight gain / loss / no change, in light of BMI categorisation / MUST score category.</p> <p>Purchase of relevant equipment to assist accurate measurements (e.g. chair scales, measuring tape).</p> <p>Facility to tailor the draft algorithm / action plan / decision aid to ensure fit with local procedures, to trial its use with local residents to indicate appropriate nutritional responses for residents for whom regular monthly weights demonstrate weight</p>

	<p>To review nutrition assessments of resident nutritional status, in relation to residents' current care plan data.</p>	<p>gain / loss / no change, in light of BMI categorisation / MUST score category.</p> <p>Determine the extent to which this tool enables staff to act to improve nutrition for residents who are at nutritional risk.</p> <p>Collect food records and map menu choices of residents with amounts actually eaten, and review/revise current meal and menu plans.</p> <p>University statistics team to produce reports of nutrition assessments in both MUST and PG-SGA formats.</p> <p><i>Note: these activities were undertaken at most facilities.</i></p>
<p>Coping with food-related behaviour that comes with dementia often involves common sense and a trial and error approach.</p>	<p>To conduct a holistic assessment of residents identified as living with dementia who exhibit disruptive behaviours in order to have a detailed picture of their life histories, current physical, psycho-social and spiritual wellbeing, and current behaviour patterns.</p> <p>To develop a programme of staff and resident afternoon activity plans tailored to residents living with dementia who exhibit disruptive behaviours.</p> <p>To explore the use of a care pathway for residents living with dementia who demonstrate behaviours of concern, including a specific nutritional component.</p>	<p>Develop, implement and evaluate a programme for those living with dementia and demonstrating disruptive behaviours. Easy to consume items ('finger foods') distributed as part of the programme.</p> <p>Seek information about existing pathways and educational resources through local experts.</p>
<p>All staff should be adequately provide with in-house education and training to provide quality care that includes organising and supervising safe mealtimes.</p>	<p>To identify staff education and training needs and access resources to meet those needs.</p>	<p>In-house training provided (e.g. hospitality courses).</p> <p>Posters to raise staff awareness about nutrition (e.g. the use of puree moulds).</p>

Encouraging Best Practice Nutrition and Hydration in Residential Aged Care

Appendix 4: Nutrition Assessment Results

Nutrition Assessments were undertaken by a team of Nutrition Assessors at the start of the plan (Assessment 1, weeks 1-3), during weeks 15-16 (Assessment 2) and during weeks 26-28 (or at the end of the intervention period, Assessment 3). The series of assessments provided a measure of any change in residents' nutrition status over each facility's engagement with the project.

The Nutrition Assessments were conducted for a sample of up to 50 residents per facility / unit and included:

- Demographic information
- Malnutrition Screening Tool¹
- Patient Generated Subjective Global Assessment (PG-SGA)²
- Anthropometry (knee height, weight, ulna length, mid arm circumference, body mass index (BMI), calf circumference)
- Lean body mass (Bioelectrical Impedance)³
- Grip Strength

All are validated instruments and generally accepted in aged care as appropriate for Nutrition Assessments. Data from the Nutrition Assessments at each facility were returned to RCGHA and entered into the project data base. A summary of the statistical analyses of the residents' assessment data was presented to respective facility staff at subsequent Nutrition Meetings, as part of the evidence that facility staff are asked to consider when deciding which aspects of their nutrition / hydration practice to change.

The numbers of residents involved in assessments to date are provided in Tables 4.1a-c.

¹ Ferguson M, et al. Development of a valid and reliable malnutrition screening tool for adult acute hospital patients. *Nutrition* 1999;15(6):458-64

² Isenring E, et al. The Scored Patient-Generated Subjective Global Assessment (PG_SGA) and its association with quality of life in ambulatory patients receiving radiotherapy. *European Journal of Clinical Nutrition* 2003;57:305-309.

³ Participating residents who had either a pacemaker or defibrillator fitted were not eligible for this assessment. Ineligible residents were identified in a document signed by facility managers, before nutrition assessments commenced.

Table 4.1a: Resident Recruitment Summary – Assessment 1

Facility Unit	Number of residents	Number invited	Reason for invitation*	Number of consents	Number unable on day	Number of assessments
High & Low Care, DSU	65	65	1	32	7	25
High Care	39	35	1	16	3	14
Low Care	30	30	1	19	0	19
DSU	21	21	1	9	1	8
High Care	99	72	2	19	4	15
Low Care	94		2	12	2	10
DSU	30		2	25	6	19
High Care	50	46	1	23	1	22
Low Care	53	56	3	24	5	20
DSU	28		3	16	0	16
High Care	70	69	1	7	3	4
Low Care	62	61	1	13	2	11
DSU	30	28	1	13	0	13
High Care	30	24	4	13	0	13
DSU	16	16	4	6	0	6
High Care	50	13	5	13	0	13
Low Care	87	50	5	34	4	32
DSU	24	2	5	2	0	2
High Care	35	33	1	21	3	18
Low Care	25	24	1	16	1	15
DSU	25	25	1	3	0	3
High Care	32	16	1	10	0	10
Low Care	15	9	1	7	0	7
DSU	18	4	1	4	0	4

*** Codes: Reasons why specific residents were approached:**

1. All residents were invited to participate (excluding respite)
2. Residents were approached based on their nutritional needs (as judged by facility staff)
3. Those residents with the lowest BMIs were asked to participate
4. All residents were invited to participate (excluding respite and transitional care)
5. All residents were invited to participate (excluding respite and Office of the Protective Commissioner), quota sampling to approximately 50 residents

DSU = dementia specific unit, may include high and/or low care residents

Table 4.1b: Resident Recruitment Summary – Assessment 2

Facility Unit	Number from A1	Number new consents	Number of deaths	Number of care changes	Number unable on day	Number of assessments
High & Low Care, DSU	32	NA	NA	NA	NA	NA
High Care	16	0	3	+1	4	10
Low Care	19	0	1	0	3	15
DSU	9	0	0	-1	2	6
High Care	19	0	1	+2	0	20
Low Care	12	1	2	0	2	9
DSU	25	1	3	-2	4	17
High Care	23	6	1	0	1	27
Low Care	24	0	1	0	3	20
DSU	16	0	1	0	2	13
High Care	7	0	1	+1	1	6
Low Care	13	0	0	-1	3	9
DSU	13	0	1	-1, +1	1	11
High Care	13	1	0	-1	1	12
DSU	6	1	0	+1	0	8
High Care	13	0	0	+1	4	10
Low Care	34	0	0	-1	2	31
DSU	2	0	0	0	0	2
High Care	21	0	0	0	3	18
Low Care	16	0	0	0	2	14
DSU	3	0	0	0	0	3
High Care	10	0	1	-1, +1	2	7
Low Care	7	0	0	-1	1	5
DSU	4	0	0	+1	0	5

Table 4.1c Resident Recruitment Summary – Assessment 3

Facility Unit	Number from A2/A2b	Number new consents	Number of deaths	Number of care changes	Number unable on day	Number of assessments
High & Low Care, DSU	NA	NA	NA	NA	NA	NA
High Care	14	0	1	+1	4	10
Low Care	18	0	1	-1	3	13
DSU	8	0	0	0	1	7
High Care	20	0	4	+4	2	18
Low Care	9	0	0	-1	1	7
DSU	17	0	0	-3	0	14
High Care	28	0	3	0	4	21
Low Care	23	0	1	0	3	19
DSU	15	0	0	0	1	14
High Care	8	0	0	+1	1	8
Low Care	10	0	0	0	2	8
DSU	12	0	1	-1	1	9
High Care	13	0	0	0	0	13
DSU	8	0	0	0	0	8
High Care	14	0	0	0	0	14
Low Care	33	0	1	0	3	29
DSU	2	0	0	0	0	2
High Care	21	0	3	-1	1	16
Low Care	16	0	0	-1	4	11
DSU	3	0	1	+2	0	4
High Care	9	0	1	0	1	7
Low Care	6	0	0	0	0	6
DSU	5	0	0	0	2	3

Table 4.2 provides baseline assessments for the nine facilities. The profiles for these facilities indicate that up to 15% of residents could be considered to be severely malnourished and 20%-60% of residents could be mildly malnourished (depending on the facility, the selection of residents, and/or the measure used). In many cases this malnutrition may be due to the resident's underlying physiological state, and may not be amenable to improvement. These data were provided to respective facilities to stimulate discussion and identify opportunities for improvements where these might be achieved. The improvements were not only to address malnutrition, but also to maintain good nutrition in those residents who might otherwise be at risk of developing poor nutrition.

Table 4.2: Baseline Assessment profiles for nine facilities

Measures	Category	Facility								
		123F	197D	242G	386G	452D	519A	696A	764E	834E
MST category (%)*	0-1 (Well nourished)	71%	55%	53%	83%	66%	61%	57%	34%	84%
	2-5 (Malnourished)	29%	45%	44%	17%	32%	32%	43%	59%	16%
	6 or above (Severely malnourished)	0%	0%	0%	0%	0%	0%	0%	0%	0%
Patient Generated Subjective Global Assessment (PG-SGA)	Mean	7	6	3.5	6.7	5.6	7.2	6.5	7.5	5.7
	Median	6	5.5	3	6	5	6	6	6	5.5
SGA category (%)*	A (Good nutrition)	38%	55%	78%	22%	47%	66%	54%	43%	63%
	B (Moderate malnutrition)	52%	45%	19%	61%	51%	27%	32%	50%	26%
	C (Severe malnutrition)	10%	0%	3%	17%	2%	7%	14%	7%	11%

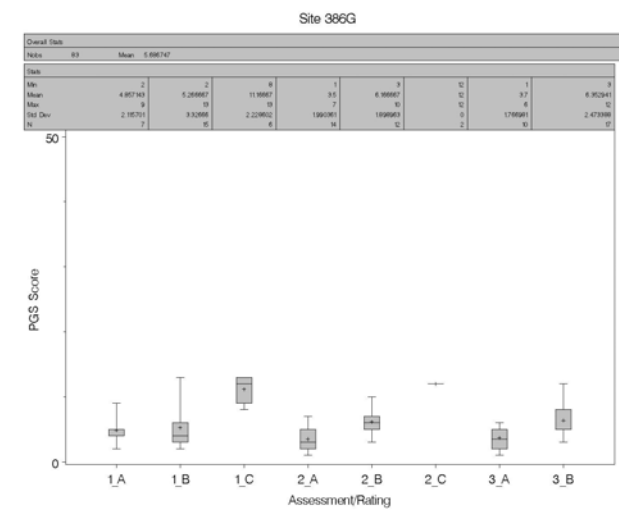
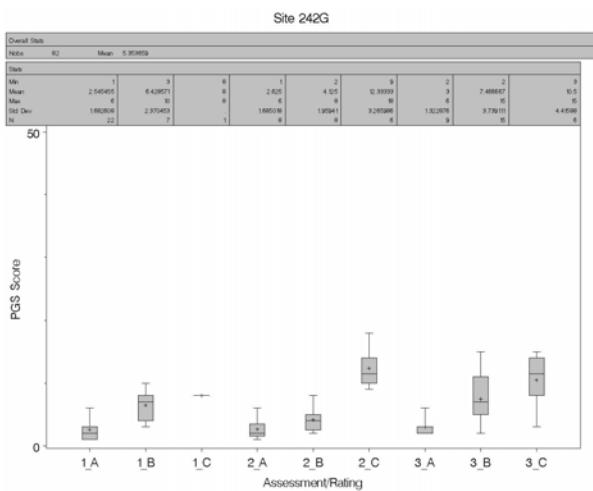
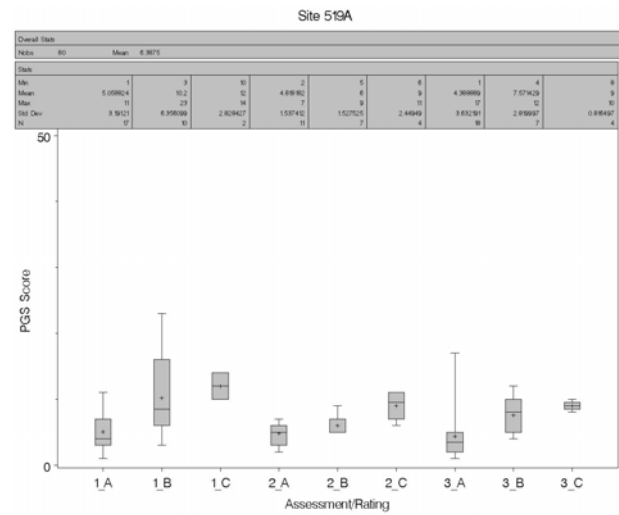
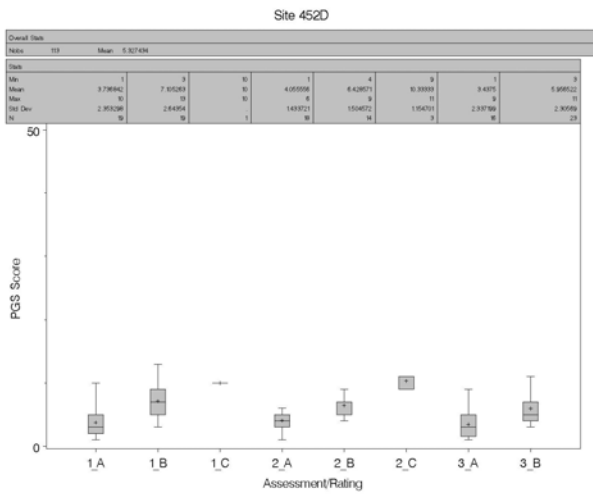
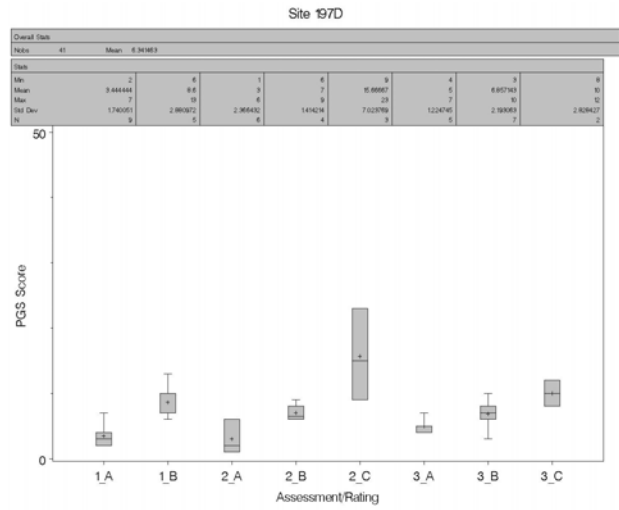
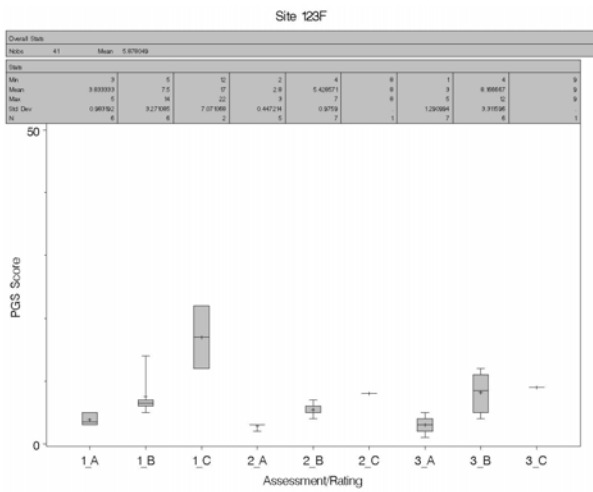
** Percentages may be imprecise due to small numbers and incomplete assessments*

Table 4.3 and Figures 4.1a-i show the PG-SGA for each SGA category for each assessment for each facility. Appropriately, PGSGA scores tend to be higher for each category increase in SGA. Most facilities showed a consistent relationship between SGA categories and PGSGA scores.

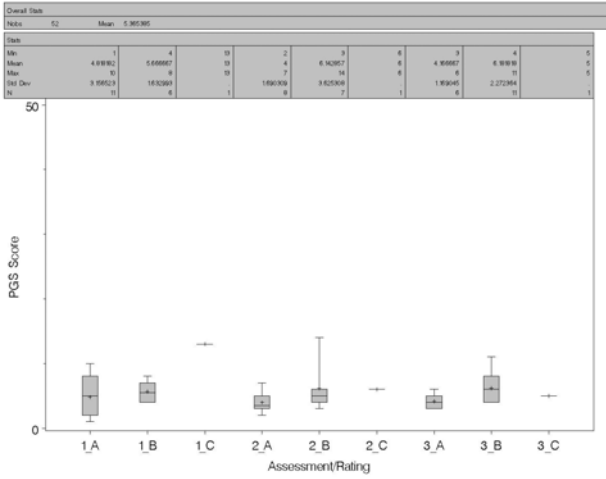
Table 4.3: PG-SGA for each SGA category for each assessment for each facility

SGA Category	ASSESSMENT 1			ASSESSMENT 2			ASSESSMENT 3		
	1A	1B	1C	2A	2b	2C	3A	3B	3C
Facility ID No.	N mean (sd)	N mean (sd)	N mean (sd)	N mean (sd)	N mean (sd)	N mean (sd)	N mean (sd)	N mean (sd)	N mean (sd)
123F	6 3.8 (0.98)	6 7.5 (3.3)	2 17 (7.1)	5 2.8 (0.45)	7 5.4 (0.10)	1 8.0 .	7 3.0 (1.30)	6 8.2 (3.3)	1 9.0 .
197D	9 3.4 (1.7)	5 8.6 (2.9)	0 . .	6 3.0 (2.4)	4 7.0 (1.4)	3 15.7 (7.0)	5 5.0 (1.2)	7 6.8 (2.2)	2 10.0 (2.8)
242G	22 2.5 1.7	7 6.4 2.4	1 8.0 .	8 2.6 1.7	8 4.1 2.0	6 12.3 3.3	9 3.0 1.3	15 7.5 3.7	6 10.5 4.4
386G	7 4.9 (2.1)	15 5.3 (3.3)	6 11.2 (2.2)	14 3.5 (2.0)	12 6.2 (1.9)	2 12.0 0	10 5.7 (1.8)	17 6.4 (2.5)	0 . .
452D	19 3.7 (2.3)	19 7.1 (2.6)	1 10.0 .	18 4.1 (1.4)	14 6.4 (1.5)	3 10.3 (1.2)	16 3.5 (2.3)	23 6.0 (2.3)	0 . .
519A	17 5.1 (3.2)	10 10.2 (6.4)	2 12.0 (2.8)	11 4.8 (1.5)	7 6.0 (1.5)	4 9.0 (2.5)	19 4.4 (3.6)	7 7.6 (2.8)	4 9.0 (0.8)
696A	11 4.8	6 5.7	1 13.0	8 4.0	7 6.1	1 6.0	6 4.2	11 6.2	1 5.0
764E	17 3.2 (2.1)	10 10.9 (5.0)	2 1.5 (14.7)	2 2.5 (0.7)	13 5.0 (2.3)	8 11.9 (2.0)	4 6.2 (3.0)	18 7.0 (2.4)	7 1.2 (3.0)
834E	11 4.1 (1.7)	5 7.4 (1.3)	2 10.0 (5.7)	6 4.0 (1.4)	10 6.4 (2.3)	1 13.0 .	5 4.2 (1.3)	13 7.5 (2.5)	0 . .

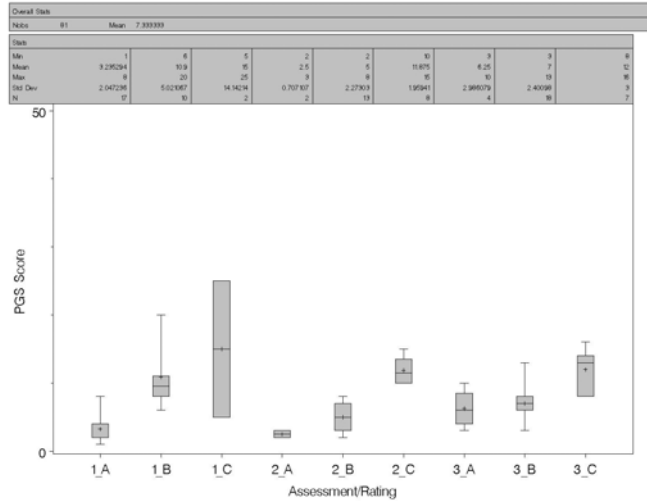
Figure 4.1a-i PG-SGA for each SGA category for each assessment for each facility.



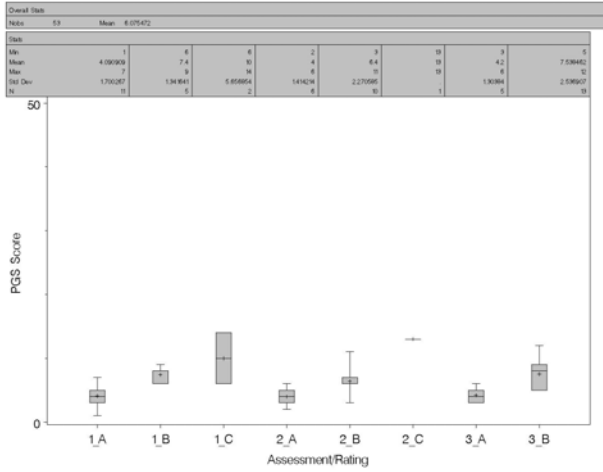
Site 666A



Site 764E

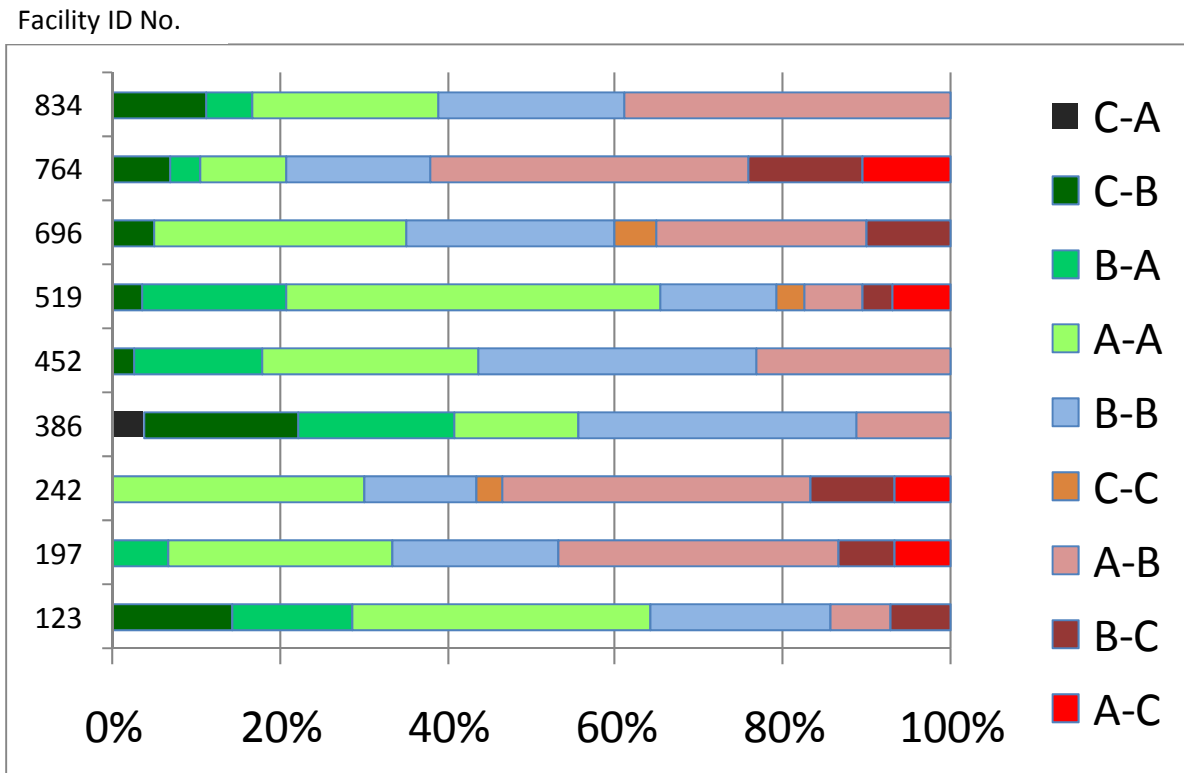


Site 834E



The change in categories and scores in Table 4.3 and Figures 4.1a-i could however be due to changes in the group of residents completing the assessments as some residents died or were unable to complete subsequent assessments and some new residents were added at each assessment.

Figure 4.2 (and Tables 4.4a-i) shows within resident change in SGA categories for each facility. Bars to the left of the graph indicate a favourable change in SGA category (e.g. C-B, B-A) or maintenance of a favourable SGA category (A-A). In most facilities, a favourable change or maintenance was observed for at least 30% of residents (except facility 764E) with the greatest favourable change being seen for facilities 123F and 519A. Bars on the right of the graph show an unfavourable change in SGA (A-C, B-C, A-B) or maintenance of poor nutrition (C-C). The greatest unfavourable change was seen for facilities 764E and 242G. Where residents died or were unable to be included in the follow-up (d/m), it is not possible to classify the change in their nutrition as favourable or unfavourable.



Dead or missing at A3 excluded from percentages. Numbers Dead or missing at A3 for each facility are: Facility 123F= 4; 197D=5; 242G=4; 386G=7; 452D=6; 519A=10; 696A=7; 764E=12; 834E=0 dead or missing at A3

Figure 4.2: Within resident change in SGA categories for each facility

Table 4.4a-i: Within resident Change in SGA category from Assessment 1 to Assessment 3

FACILITY 123F					
SGA category A1	SGA category A3				Total
	A	B	C	D/M	
A	5	1	0	0	6
B	2	3	1	4	10
C	0	2	0	0	2
Total	7	6	1	4	18

Desirable change 12/18
D/M = death or missing at A3

FACILITY 197D					
SGA category A1	SGA category A3				Total
	A	B	C	D/M	
A	4	5	1	1	11
B	1	3	1	4	9
Total	5	8	2	5	20

Desirable change 8/20
D/M = death or missing at A3

FACILITY 242G					
SGA category A1	SGA category A3				Total
	A	B	C	D/M	
A	9	11	2	4	26
B	0	4	3	0	7
C	0	0	1	0	1
Total	9	15	6	4	34

Desirable change 13/34
D/M = death or missing at A3

FACILITY 386G					
SGA category A1	SGA category A3				Total
	A	B	D/M		
A	4	3	0		7
B	5	9	7		21
C	1	5	0		6
Total	10	17	7		34

Desirable change 24/34
D/M = death or missing at A3

FACILITY 452D					
SGA category A1	SGA category A3				Total
	A	B	D/M		
A	10	9	3		22
B	6	13	3		22
C	0	1	0		1
Total	16	23	6		45

Desirable change 30/45
D/M = death or missing at A3

FACILITY 519A					
SGA category A1	SGA category A3				Total
	A	B	C	D/M	
A	13	2	2	8	25
B	5	4	1	1	11
C	0	1	1	1	3
Total	18	7	4	10	39

Desirable change 23/39
D/M = death or missing at A3

FACILITY 696A					
SGA category A1	SGA category A3				Total
	A	B	C	D/M	
A	6	5	0	3	14
B	0	5	2	2	9
C	0	1	1	2	4
Total	6	11	3	7	27

Desirable change 12/27
D/M = death or missing at A3

FACILITY 764E					
SGA category A1	SGA category A3				Total
	A	B	C	D/M	
A	3	11	3	1	18
B	1	5	4	10	20
C	0	2	0	1	3
Total	4	18	7	12	41

Desirable change 11/41
D/M = death or missing at A3

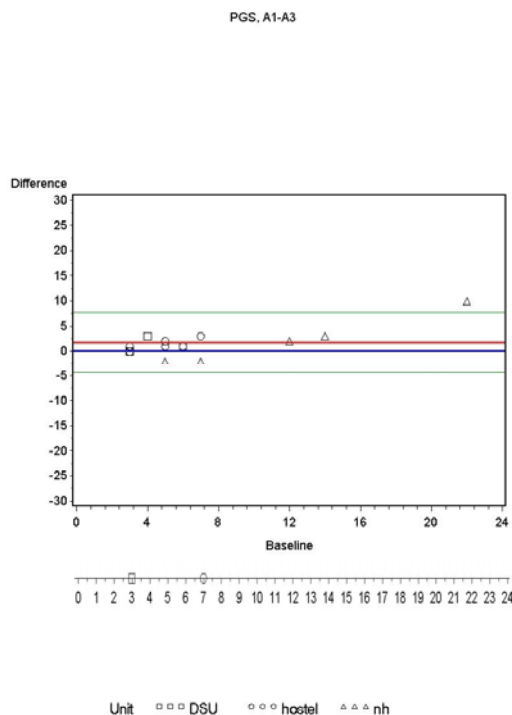
FACILITY 834E			
SGA category A1	SGA category A3		Total
	A	B	
A	4	7	11
B	1	4	5
C	0	2	2
Total	5	13	18

Desirable change 11/18

Figures 4.3a-i show the within resident change in PG-SGA scores for each facility. In each plot, the red line shows the mean change in scores from Assessment 1 – Assessment 3 in each facility. The blue lines show zero change, and +/- 2 standard deviations of the mean change. The line below the graph shows the Assessment 1 PG-SGA for residents who died or otherwise could not be included at Assessment 3. Different symbols represent where the resident was at the Assessment 1 (nursing home NH, hostel, or dementia specific unit DSU). A change above the zero line indicates a positive change and a change below the zero line indicates a negative change in PG-SGA. A change of +/-5 was considered to be clinically significant. Note that a change in PG-SGA scores can occur without a change in the SGA category, and would indicate a change in nutrition-related symptoms without a change in nutrition status.

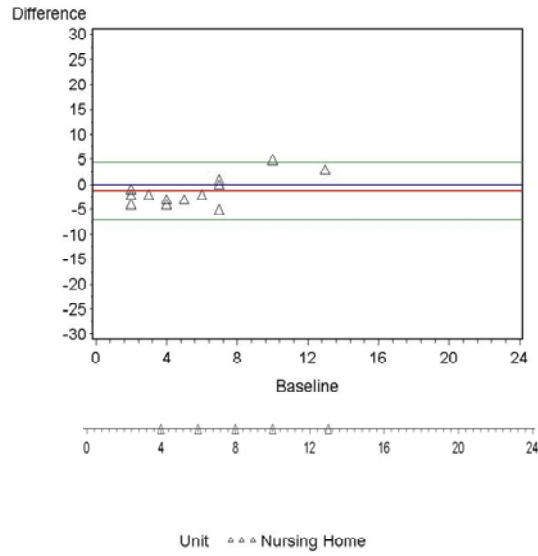
Most facilities show a mean change in PG-SGA scores that is close to zero. Some individuals show large changes in PG-SGA potentially indicating a significant change in their symptoms (although the statistical phenomenon of regression to the mean remains a possible alternative explanation).

Figures 4.3a-i: within resident change in PG-SGA scores for each facility.



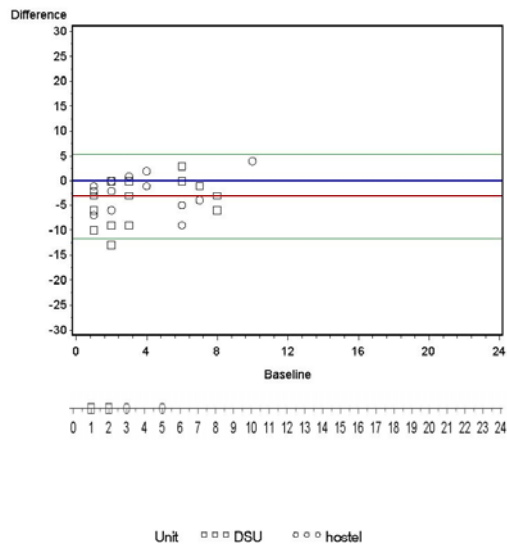
'Bland-Altman' style plot for PGS comparing measurements for Assessments 1 and 3 (Diff = A1 – A3; so positive values correspond to improved nutritional status) – Site 123F

PGS A1-A3



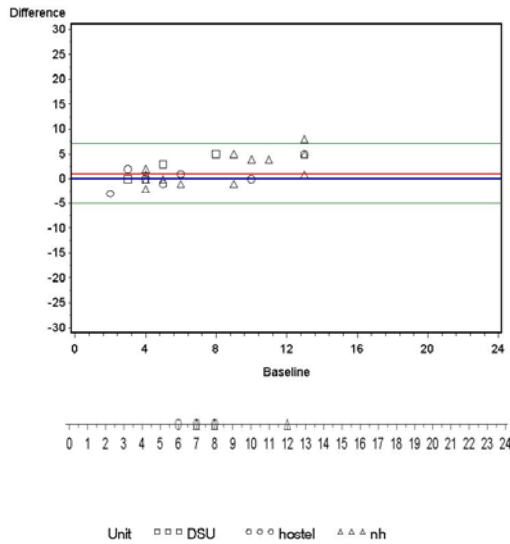
'Bland-Altman' style plot for PGS comparing measurements for Assessments 1 and 3 (Diff = A1 – A3; so positive values correspond to improved nutritional status) – Site 197D

PGS, A1-A3



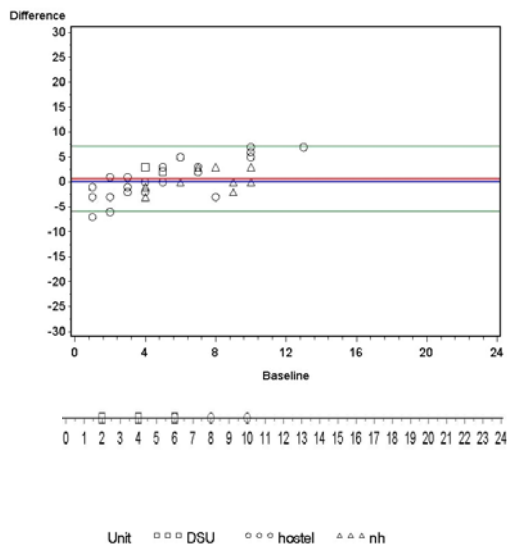
'Bland-Altman' style plot for PGS comparing measurements for Assessments 1 and 3 (Diff = A1 – A3; so positive values correspond to improved nutritional status) – Site 242G

PGS, A1-A3



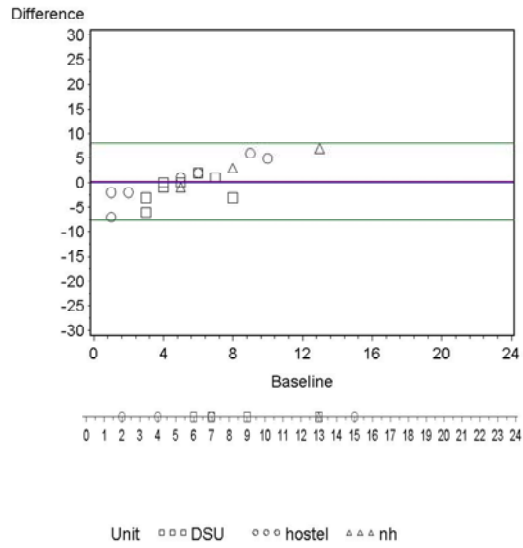
'Bland-Altman' style plot for PGS comparing measurements for Assessments 1 and 3 (Diff = A1 – A3; so positive values correspond to improved nutritional status) – Site 386G

PGS, A1-A3



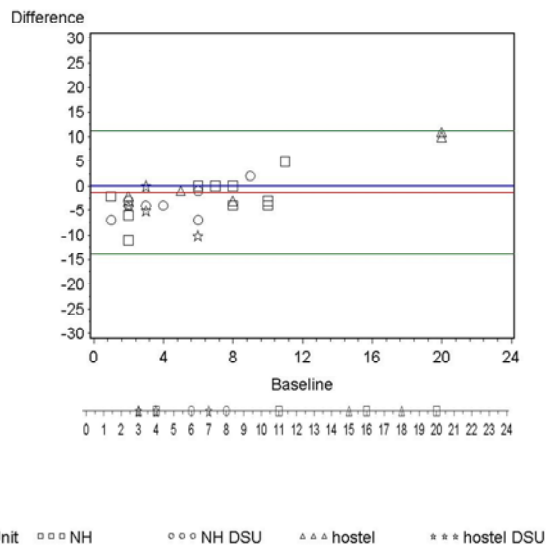
'Bland-Altman' style plot for PGS comparing measurements for Assessments 1 and 3 (Diff = A1 – A3; so positive values correspond to improved nutritional status) – Site 452D

PGS, A1-A3



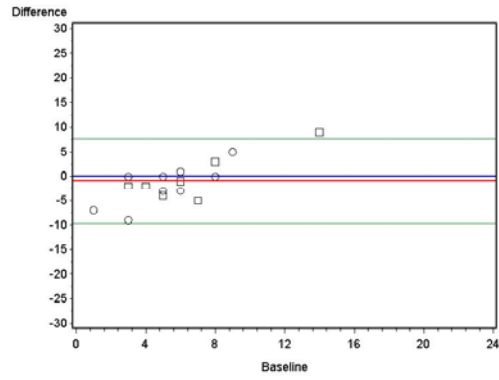
'Bland-Altman' style plot for PGS comparing measurements for Assessments 1 and 3 (Diff = A1 - A3; so positive values correspond to improved nutritional status) - Site 696A

PGS, A1-A3



'Bland-Altman' style plot for PGS comparing measurements for Assessments 1 and 3 (Diff = A1 - A3; so positive values correspond to improved nutritional status) - Site 764E

PGS, A1-A3



Unit □ □ □ DSU ○ ○ ○ nh

'Bland-Altman' style plot for PGS comparing measurements for Assessments 1 and 3 (Diff = A1 - A3; so positive values correspond to improved nutritional status) - Site 834E

In order to gain an overall picture of the change in nutrition categories (SGA) and scores (PG-SGA) we created an overall point scoring system where residents were awarded:

- +2 points for SGA C-A (improved nutrition)
- +1 point for SGA C-B (improved nutrition)
- +1 point for SGA B-A (improved nutrition)
- +1 point for SGA A-A (maintained good nutrition)
- 0 points for SGA B-B (maintained mild malnutrition)
- -1 point for SGA C-C (maintained poor nutrition)
- -1 point for SGA B-C (worsening nutrition)
- -1 point for SGA A-B (worsening nutrition)
- -2 points for SGA A-C (worsening nutrition)
- +3 points for PG-SGA ≥ 15 (improved nutrition symptoms)
- +2 points for positive change in PG-SGA 10-14 (improved nutrition symptoms)
- +1 point for positive change in PG-SGA 5-9 (improved nutrition symptoms)
- 0 points for no change in PG-SGA
- -1 point for negative change in PG-SGA 5-9 (worse nutrition symptoms)
- -2 points for negative change in PG-SGA 10-14 (worse nutrition symptoms)
- -3 points for negative change in PG-SGA ≥ 15

The results of this scoring system are shown in Figure 4.4 and Table 4.5. Grey bars to the extreme left of each set indicate residents who died or otherwise could not be assessed at assessment 3. Yellow bars indicate 0 change in nutrition score. Bars to the right of the yellow bars in each set indicate a positive change in nutrition category or PG-SGA scores. It should be noted that a zero change is not an undesirable outcome among this frail resident population who are at high risk of declining nutrition.

Five facilities showed a small positive change on these change scores, and one facility showed a change that was close to zero. Three facilities showed a small negative change. Facilities 123F, 386G, and 519A showed the greatest positive change. Facilities 242G and 764E showed the greatest negative change.

Table 4.5: Means and standard deviations for change scores for each facility

FACILITY ID No.	Mean	SD
123F	0.64	1.01
197D	-0.14	1.23
242G	-0.73	1.46
386G	0.67	0.96
452D	0.28	1.00
519A	0.58	1.21
696A	0.11	1.18
764E	-0.52	1.74
834E	-0.06	1.30

(Dead/Missing scores not included)

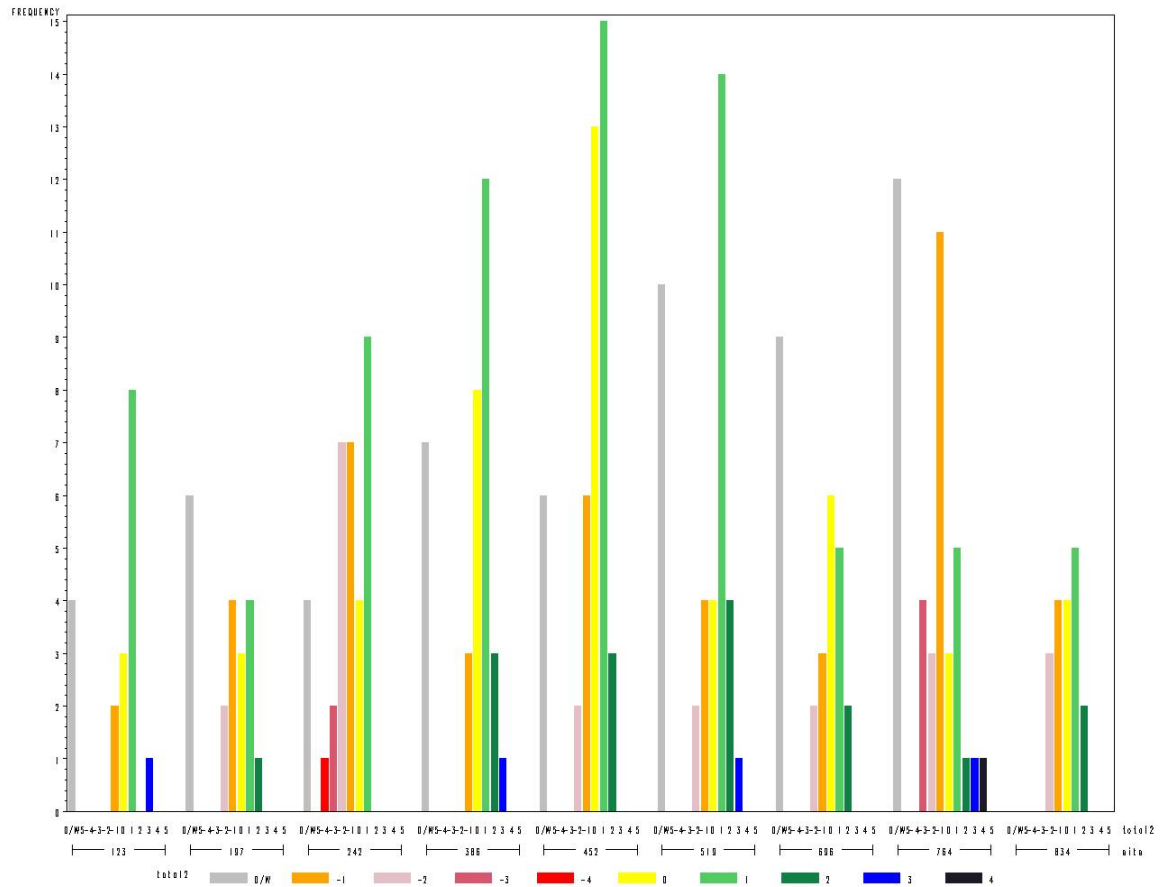
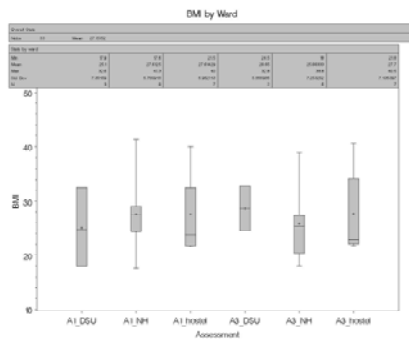


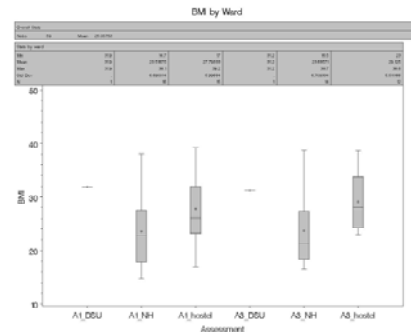
Figure 4.4: Change Scores for changes in SGA and PG-SGA for each facility

Anthropometric measures (body mass index (BMI), mid arm circumference, calf circumference) assessments 1 and 3 for each facility are shown in Figures 4.5a-i. There was no significant difference in BMI between facilities, between units within facilities or between Assessment 1 and Assessment 3. Highest mean BMI of 31.9 was recorded for the Dementia Specific Unit (DSU) of Facility 386G (1 resident), and the lowest mean BMI of 18.0 was recorded for the Nursing Home (NH) in Facility 764E.

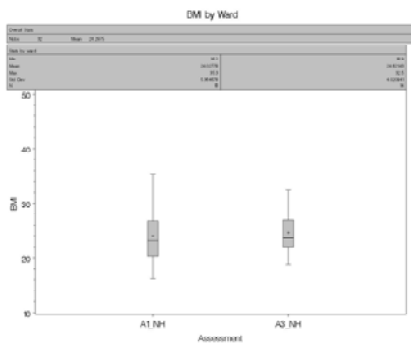
Figure 4.5a-i: Body Mass Index



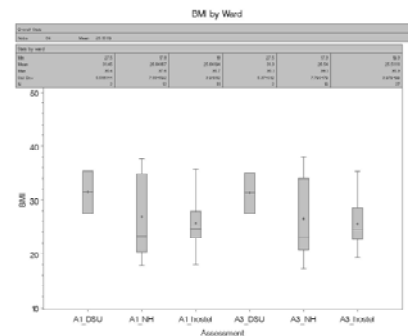
Facility 123F



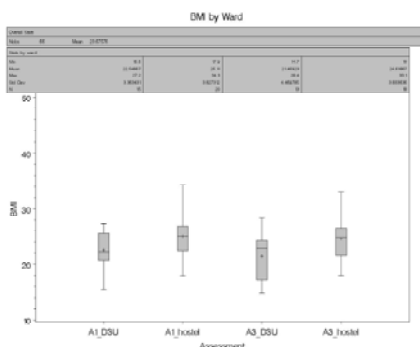
Facility 386G



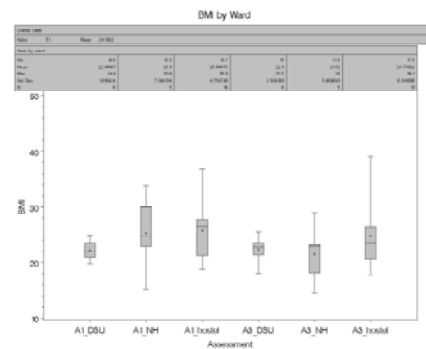
Facility 197D



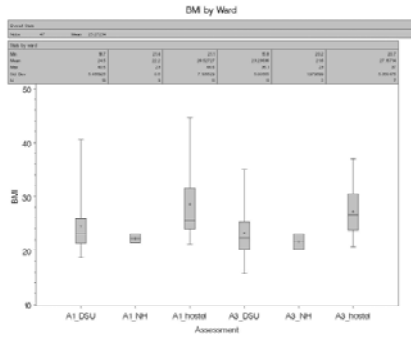
Facility 452D



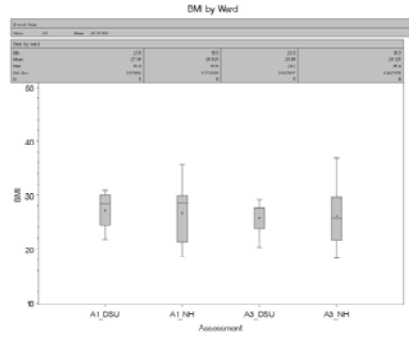
Facility 242G



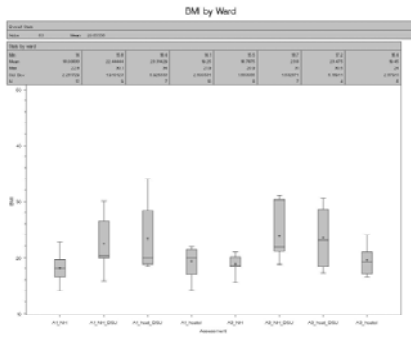
Facility 519A



Facility 696A



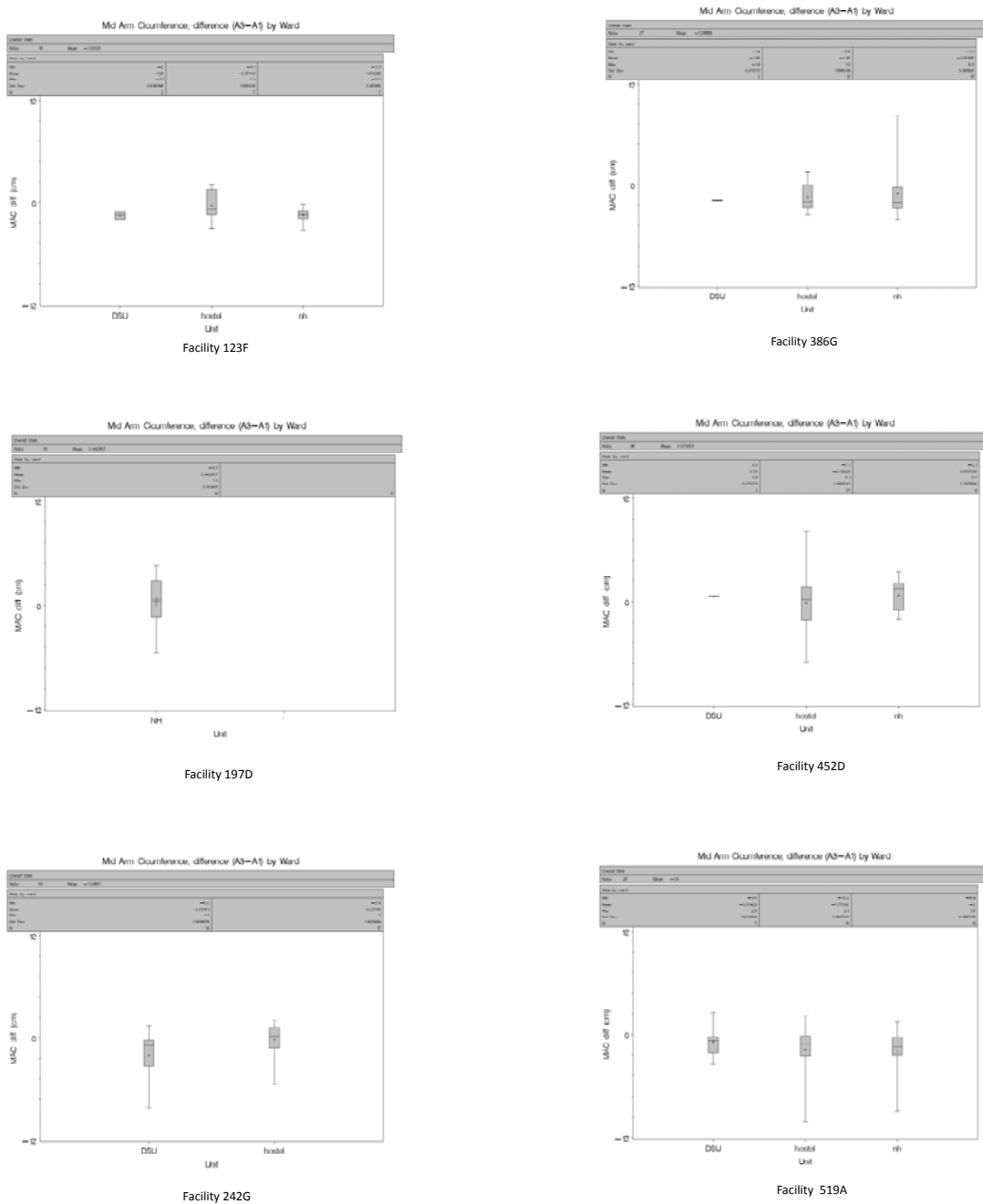
Facility 834E

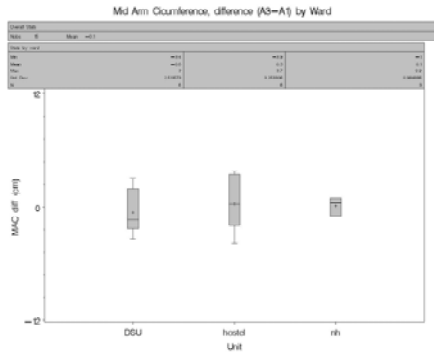


Facility 764E

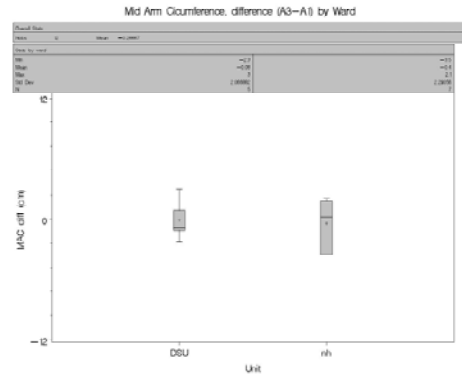
Figures 4.6a-i and 4.7a-i show the difference in mid arm and calf circumference (A3 – A1) for unit in each facility, respectively. There were few significant differences between A3 and A1 (mean differences were approximately 0) except for the DSU in Facility 764E where there was a negative change of -2.8 cm and for the DSU in Facility 123F (-1.6cm).

Figure 4.6a-i: Difference in Mid Arm Circumference (A3-A1)

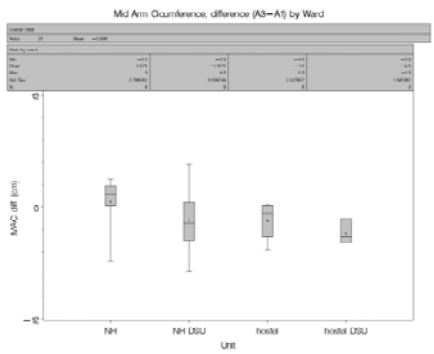




Facility 696A

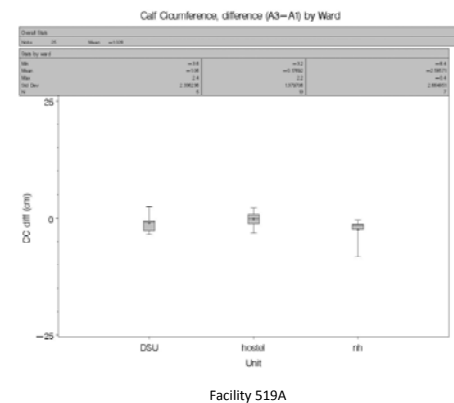
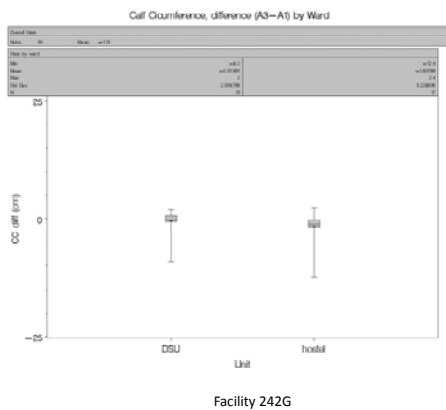
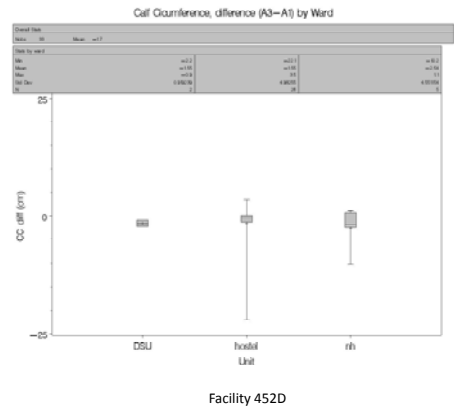
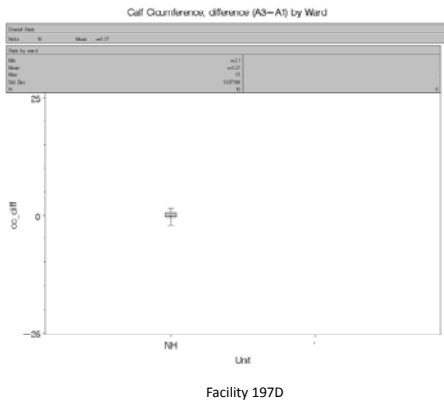
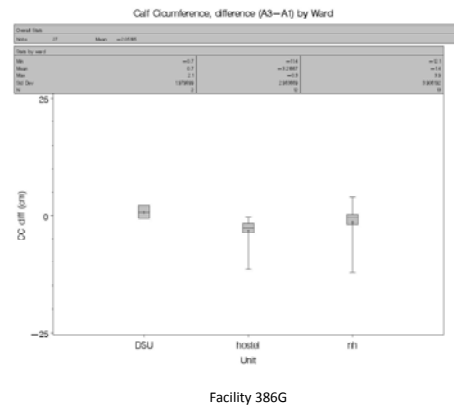
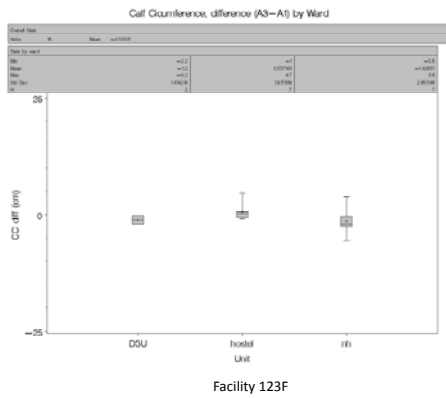


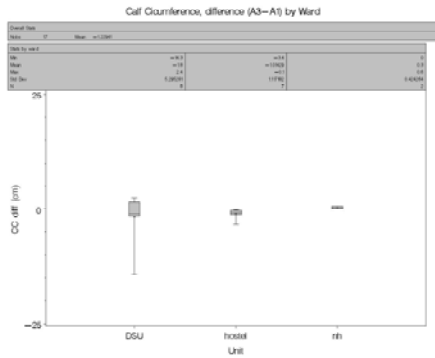
Facility 834E



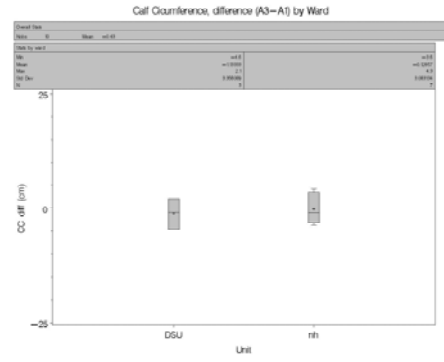
Facility 764E

Figure 4.7a-i: Difference in Calf Circumference (A3-A1)

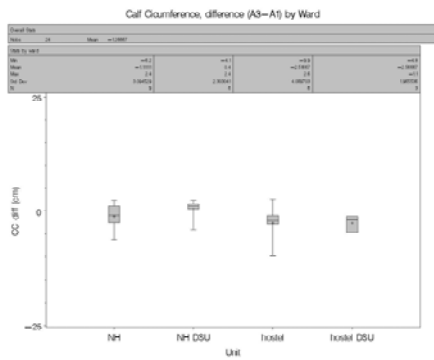




Facility 696A



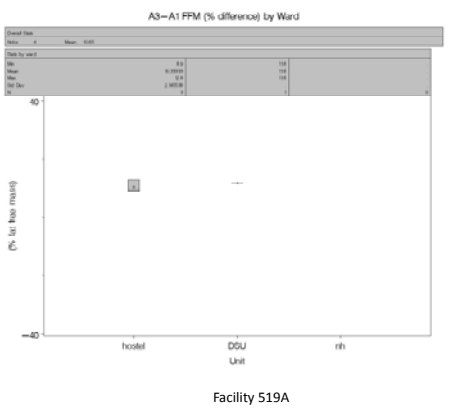
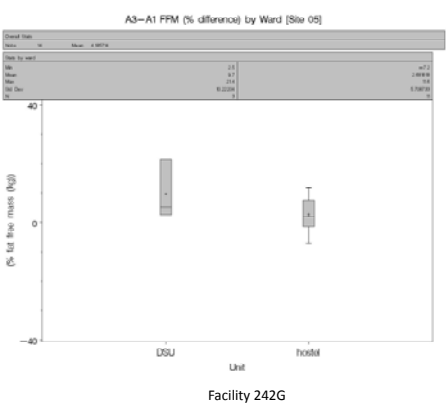
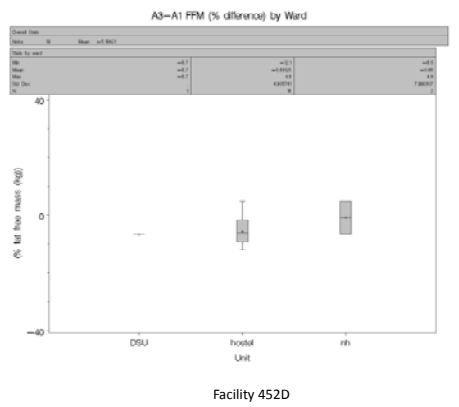
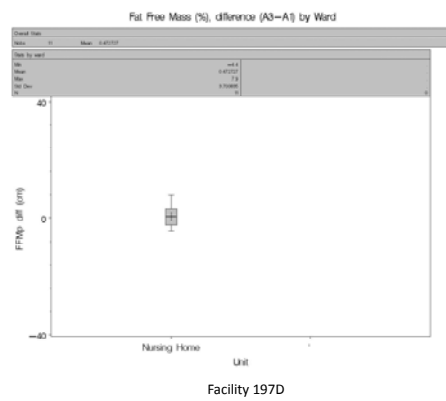
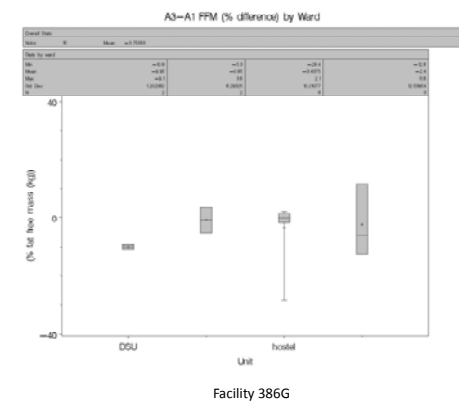
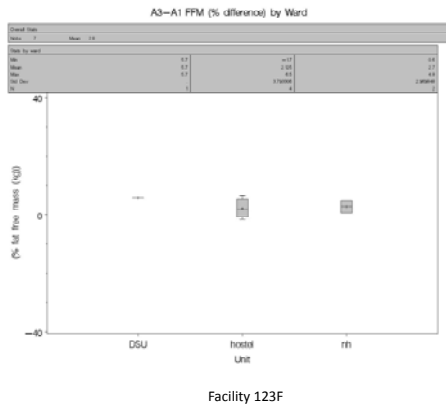
Facility 834E

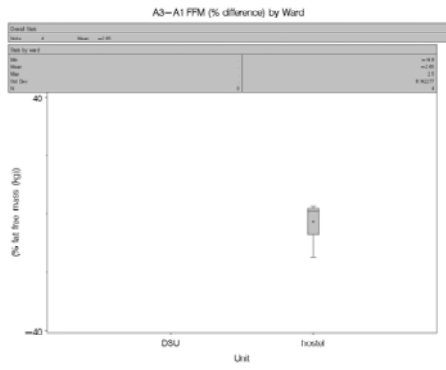


Facility 764E

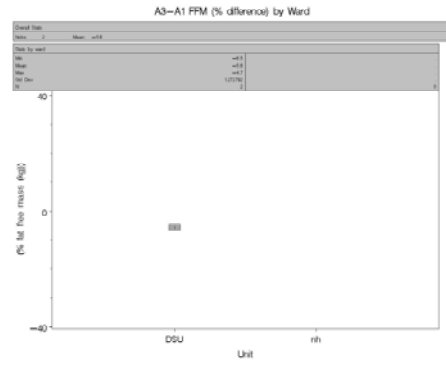
Figures 4.8a-i show results of the Bioelectrical Impedance measures of lean body mass (percentage change in free fat mass FFM). There were few significant differences between A3 and A1. Some positive changes were seen in Facilities 123F, 242G and 519A, and negative changes were seen in Facilities 386G and 834E.

Figures 4.8a-i: Percentage change in Free Fat Mass

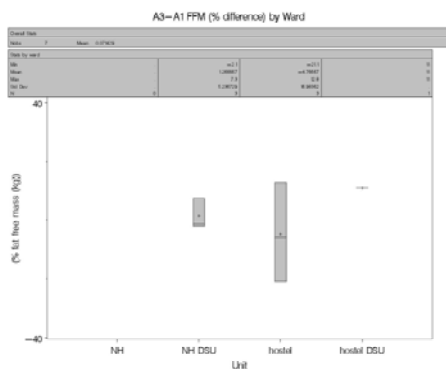




Facility 696A



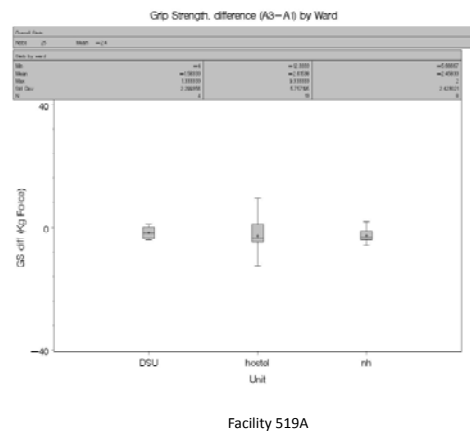
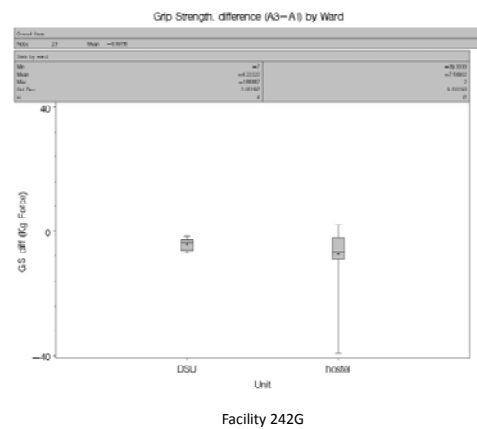
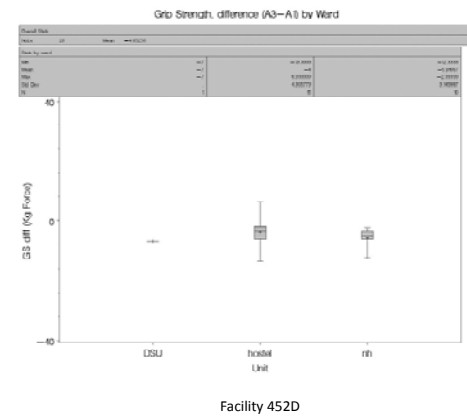
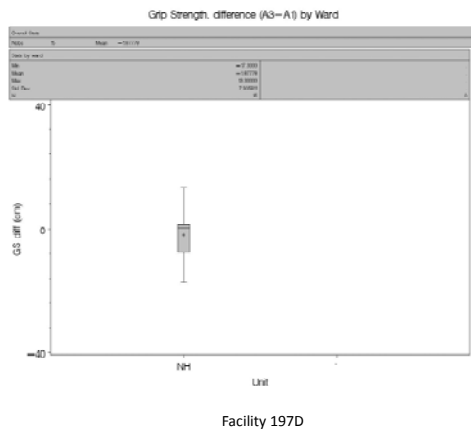
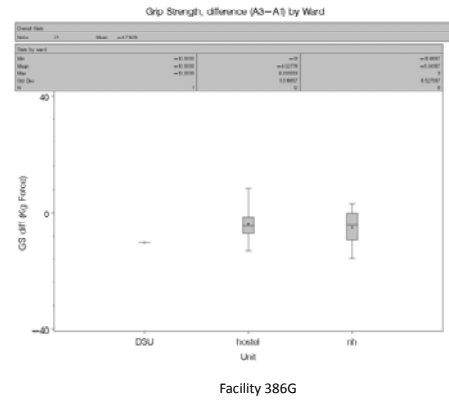
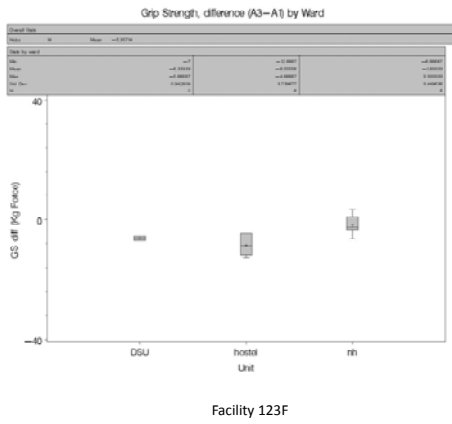
Facility 834E

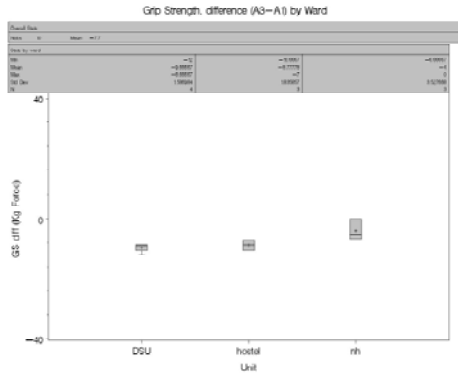


Facility 764E

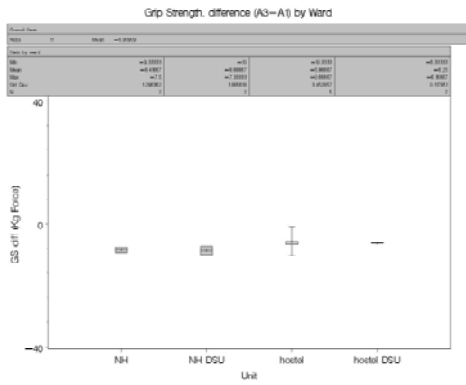
Figures 4.9a-i show differences in grip strength (A3-A1). There is a significant negative change in a number of units, consistent with increasing frailty among the residents.

Figures 4.9a-i: Differences in grip strength (A3-A1).

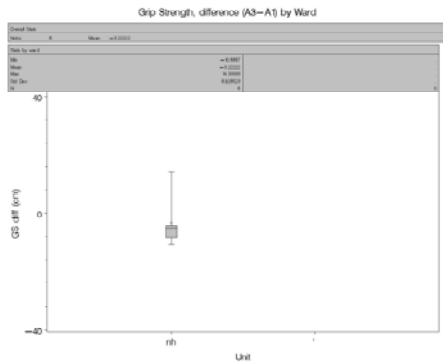




Facility 696A



Facility 764E



Facility 834E

Table 4.6 summarises the overall results of the nutritional assessments for each facility. Consistently favourable results were seen in Facilities 123F and 519A. Facilities 386E, and 452D showed favourable results on most parameters in the table. Only one facility, Facility 764E, showed no favourable results on any parameter.

Table 4.6: Overall results of the nutritional assessments for each facility.

Facility ID Number	Favourable Change in SGA > 30% of residents	Favourable change in SGA > 40% of residents	Favourable change in SGA > 50% of residents	Positive Change scores (composite of change in SGA and PG-SGA)	Positive change in any anthropometric measure
123F	✓	✓	✓	✓	✓FFM Negative mean change in mid-arm circumference (DSU)
197D	✓			Close to zero change	
242G	✓			Negative change	✓FFM
386G	✓	✓	✓	✓	
452D	✓	✓		✓	
519A	✓	✓	✓	✓	✓FFM
696A	✓			✓	
764E				Negative change	Negative mean change in mid-arm circumference (DSU)
834E	✓			Close to 0 change	

Encouraging Best Practice Nutrition and Hydration in Residential Aged Care

Appendix 5: Quality of Life Assessments

Quality of Life Assessments were made using the DEMQoL and DEMQoL proxy instruments (completed by the nominated carer). Measures were made at each Assessment 1, 2 and 3. Figures 5.1a-i and Table 5.1 show the DEMQoL for each facility. There was a wide variation in scores and no clear pattern across facilities, between raters, or between assessments.

Figures 5.1a-i: DEMQoL scores for each assessment for each facility

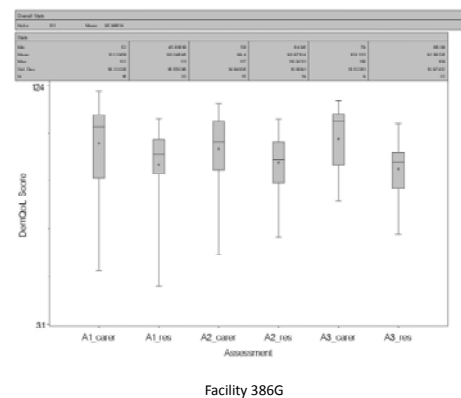
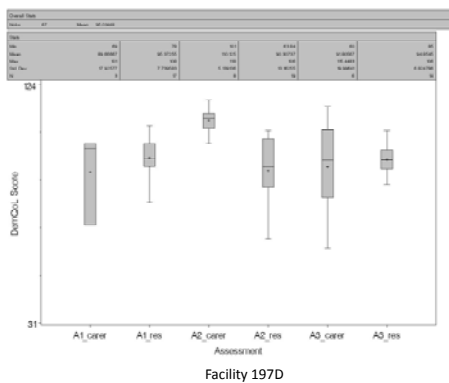
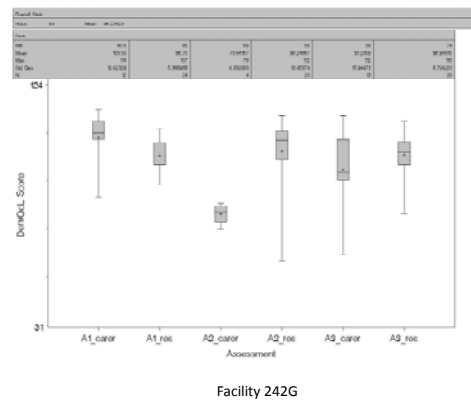
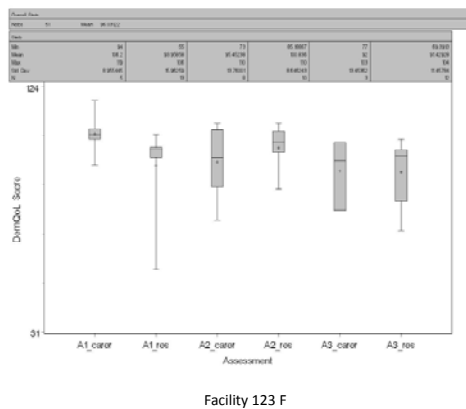


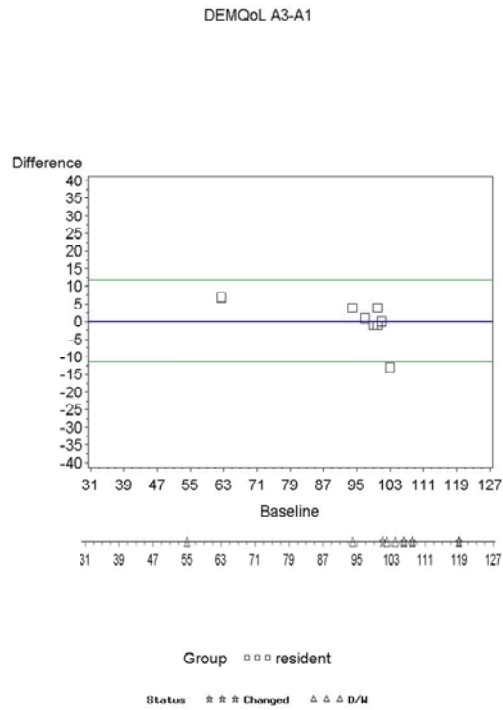
Table 5.1: DEMQoL for each assessment for each facility.

Facility ID No.	Assessment 1		Assessment 2		Assessment 3	
	Resident	Carer	Resident	Carer	Resident	Carer
	N	N	N	N	N	N
	mean	mean	mean	mean	mean	mean
	(sd)	(sd)	(sd)	(sd)	(sd)	(sd)
123F	13	5	10	8	12	3
	94.0	106.2	100.8	95.5	91.4	92
	(16)	(9.0)	(8.6)	(13.8)	(11.5)	(13.5)
197D	17	3	19	8	14	6
	95.4	89.7	90.3	110.1	94.9	91.8
	(7.7)	(17.9)	(13.2)	(5.1)	(6.8)	(20.0)
242G	24	12	20	4	20	13
	96.8	103.6	98.2	73.8	96.9	91.2
	(5.4)	(10.0)	(13.5)	(4.3)	(8.7)	(15.9)
386G	20	16	19	15	22	9
	93.0	101.3	93.9	99.4	91.4	103.1
	(16.6)	(18.2)	(10.8)	(14.8)	(11.0)	(13.5)
452D	44	3	37	6	38	2
	91.2	91.2	94.8	102.9	91.7	105
	(12.9)	(14.8)	(12.7)	(18.7)	(13.2)	(4.2)
519A	35	3	20	4	19	6
	89.3	101	90.3	92	87.9	103.2
	(13.2)	(22.5)	(14.3)	(24.9)	(14.8)	(6.5)
696A	12	14	9	18	9	14
	91.2	104.5	90.8	100.7	93.4	98.1
	(14.2)	(8.8)	(10.2)	(9.9)	(7.9)	(14.9)
764E	29	13	11	25	13	25
	87.7	98.6	89.8	98.2	92.8	101.5
	(14.2)	(11.9)	(17.9)	(15.7)	(16.3)	(14.7)
834E	7	12	7	13	8	13
	95.1	102.4	97.8	105.7	91.4	103.2
	(18.5)	(11.5)	(8.3)	(10.0)	(10.4)	(8.3)

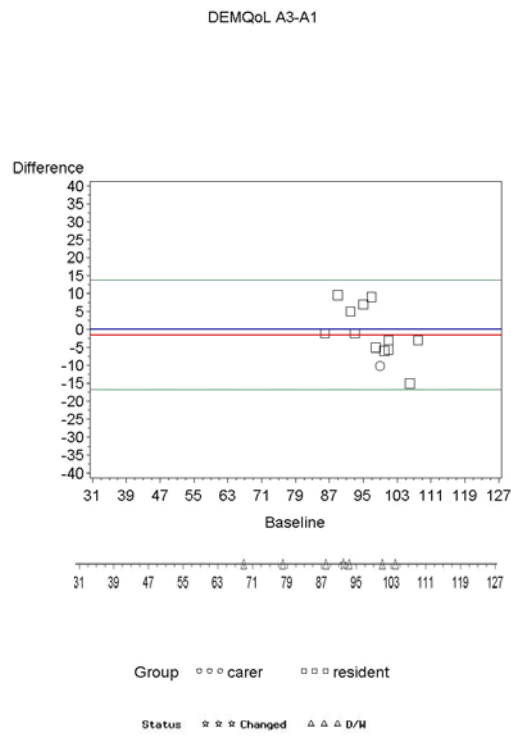
Figures 5.2a-i show within resident change in resident's DEMQoL scores for each facility (A3-A1). In each plot, the red line shows the mean change in scores from Assessment 1 – Assessment 3 in each facility. The blue lines show zero change, and +/- 2 standard deviations of the mean change. The line below the graph shows the Assessment 1 DEMQoL for residents who died or otherwise could not be included at Assessment 3. Different symbols represent where the resident was at the Assessment 1 (nursing home NH, hostel, or dementia specific unit DSU). A change above the zero line indicates a positive change and a change below the zero line indicates a negative change in DEMQoL.

Most facilities show a mean change in resident's DEMQoL scores that was close to zero. Some individuals show large changes in DEMQoL, potentially indicating a significant change in their quality of life (although the statistical phenomenon of regression to the mean remains a possible alternative explanation).

Figures 5.2a-i: within resident change in DEMQoL scores for each facility (A3-A1).

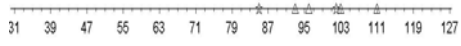
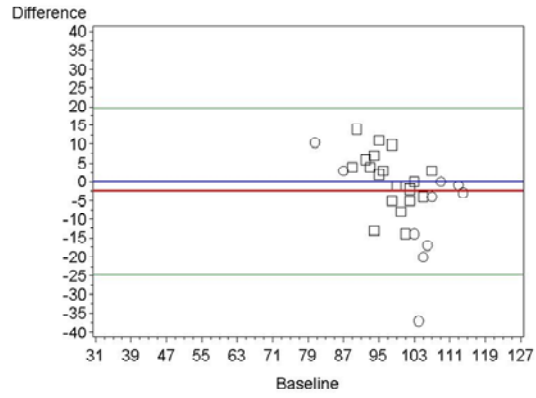


Facility 123F



Facility 197D

DEMQoL A3-A1

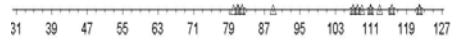
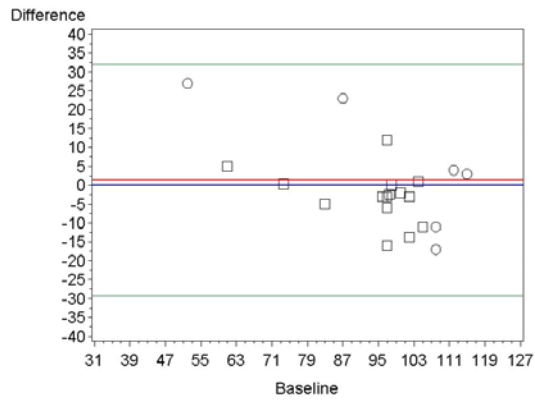


Group ○ ○ ○ carer □ □ □ resident

Status ★ ★ ★ Changed △ △ △ D/I

Facility 242G

DEMQoL A3-A1

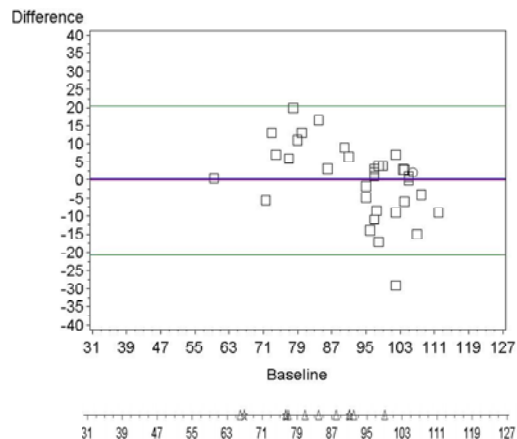


Group ○ ○ ○ carer □ □ □ resident

Status ★ ★ ★ Changed △ △ △ D/I

Facility 386G

DEMQoL A3-A1

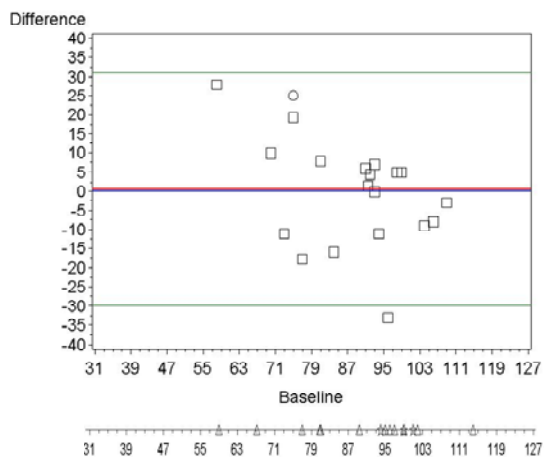


Group ○○○ carer □□□ resident

Status *** Changed △△△ D/M

Facility 452D

DEMQoL A3-A1

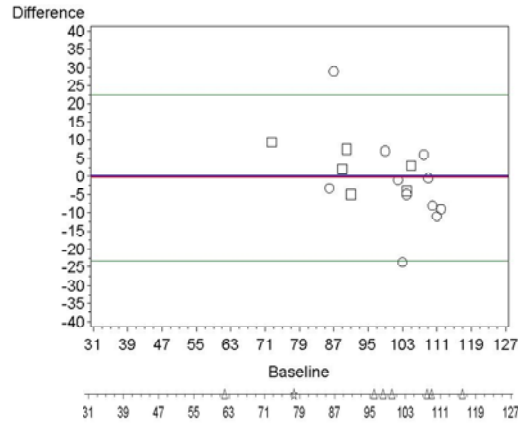


Group ○○○ carer □□□ resident

Status *** Changed △△△ D/M

Facility 519A

DEMQoL A3-A1

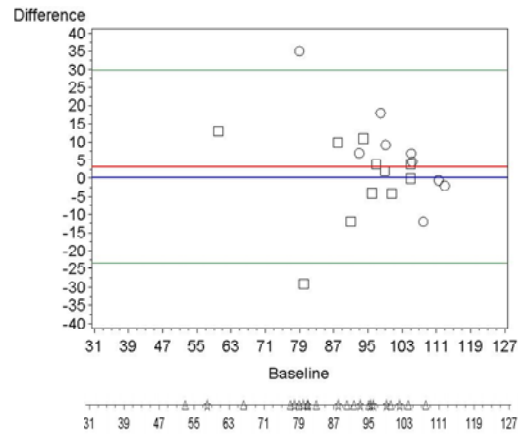


Group ○○ carer □□ resident

Status *** Changed △△△ D/N

Facility 696A

DEMQoL A3-A1



Group ○○ carer □□ resident

Status *** Changed △△△ D/N

Facility 764E

Appendix 6: Food Service Satisfaction Survey Results

An anonymous Food Services Survey was offered to all hostel residents in each participating facility. The administration of the Food Services Survey was coincident with the collection of data for Nutrition Assessments 1 and 3. The results of the Food Service Survey at Assessment 1 are provided in Tables 6.1-6.5. All tables need to be interpreted with caution as the sample sizes from each facility are small and there is significant missing data on some items.

The vast majority of residents across all facilities felt that the food service at their facility was either very good or good. However, the survey did identify a number of areas for improvement across facilities.

Table 6.1: Overall Satisfaction with Food Service

Facility	123F	197D	242G	386G	452D	519A	696A	764E
Overall, how would you rate the food service?	(n=8) %	(n=32) %	(n=12) %	(n=7) %	(n=29) %	(n=19) %	(n=29) %	(n=60) %
Very good	50	25	17	71	45	32	17	40
Good	25	25	58	29	31	47	41	43
Not good or bad	25	19	0	0	10	16	21	15
Poor	0	9	0	0	3	0	7	2
Very poor	0	9	0	0	0	0	0	0
Missing	0	12.5	25	0	10	5	14	0

Many residents felt they had limited choices in receiving preferred foods, the amount of food they received, and the variety of meals offered. There were differences between facilities in relation to how many residents felt able to choose where they sat while eating, with 50% of residents in one facility feeling they rarely or never had this choice. Most residents were able to add condiments to meals as they wished. However, the majority of residents could not always access snacks if wanted.

Table 6.2: Hunger and Food Quantity

Facility	123F	197D	242G	386G	452D	519A	696A	764E
	%	%	%	%	%	%	%	%
I receive enough food								
Always	75	50	83	86	83	84	59	85
Often/Sometimes	12.5	31	17	14	17	16	34	13
Rarely/Never	12.5	6	0	0	0	0	0	2
I still feel hungry after my meal								
Always	0	0	8	0	3	0	3	3
Often/Sometimes	12.5	25	8	0	28	16	14	10
Rarely/Never	87.5	62.5	75	100	69	84	69	87
I feel hungry in between meals								
Always	0	3	8	0	10	5	0	7
Often/Sometimes	0	22	17	29	28	5	17	23
Rarely/Never	100	56	75	71	62	90	69	68

*Totals may not add to 100, due to rounding and/or missing data

Table 6.3: Food Choices

Facility	123F	197D	242G	386G	452D	519A	696A	764E
	%	%	%	%	%	%	%	%
I am asked about the food and drink that I like								
Always	12.5	16	25	29	14	58	31	37
Often/Sometimes	37.5	22	50	57	45	21	17	32
Rarely/Never	50	44	25	0	34	21	38	32
I am able to choose where I sit to eat my meal								
Always	37.5	19	58	71	45	79	34	88
Often/Sometimes	0	3	0	14	14	11	7	0
Rarely/Never	50	50	42	14	31	11	38	10
I like the amount of food choice I have								
Always	12.5	31	25	100	45	68	45	53
Often/Sometimes	37.5	25	67	0	45	21	38	40
Rarely/Never	50	22	0	0	3	11	7	7
I like can add salt, pepper and sauces to my food if I want								
Always	50	56	75	100	76	89	62	93
Often/Sometimes	37.5	22	17	0	10	11	10	5
Rarely/Never	12.5	3	8	0	3	0	7	2
There is enough variety for me to choose meals that I want to eat								
Always	12.5	34	50	71	45	68	48	53
Often/Sometimes	62.5	19	42	29	45	16	34	32
Rarely/Never	25	31	8	0	3	16	3	13
I can have a snack (e.g. sandwich / toast) whenever I choose								
Always	37.5	12.5	42	43	31	32	41	50
Often/Sometimes	37.5	19	42	43	24	42	7	25
Rarely/Never	25	31	8	0	24	26	31	23

*Totals may not add to 100, due to rounding and/or missing data

There was considerable variation between facilities in relation to perceptions of food quality, although the preponderance of responses was positive. While the majority of residents responded that meals tasted nice, a significant minority in one facility felt that their meals never or rarely had excellent and distinct flavours. Attitudes to the quality of meat were primarily positive, but there were mixed feelings about the quality of cooked vegetables, with notable proportions not liking the way these were cooked, and residents variously feeling these were either too hard or too soft. Of concern is the third of residents in one facility who felt that their hot meals were rarely or never at the right temperature, and the large minorities who were not happy with portion sizes. Most residents were positive about how their meals were presented.

Table 6.4: Meal Quality and Enjoyment

Facility		123F	197D	242G	386G	452D	519A	696A	764E
		%	%	%	%	%	%	%	%
The meals taste nice									
	Always	25	28	25	57	52	63	21	30
	Often/Sometimes	75	47	58	43	45	21	66	67
	Rarely/Never	0	9	0	0	0	16	0	3
The meals have excellent and distinct flavours									
	Always	0	22	33	57	41	58	10	12
	Often/Sometimes	75	19	50	29	48	26	69	75
	Rarely/Never	12.5	41	8	14	7	16	10	13
I like the way the vegetables are cooked									
	Always	12.5	19	42	71	52	53	17	32
	Often/Sometimes	75	37.5	17	29	38	32	48	52
	Rarely/Never	12.5	34	17	0	3	16	28	17
The meat is tough and dry									
	Always	12.5	12.5	8	0	7	5	7	7
	Often/Sometimes	50	50	33	29	59	21	55	55
	Rarely/Never	25	28	42	57	34	68	34	37
The food is as good as I expected									
	Always	25	25	33	57	31	74	21	37
	Often/Sometimes	50	31	33	43	55	11	52	60
	Rarely/Never	25	25	8	0	6	16	14	3
I really enjoy eating my meals									
	Always	25	31	33	57	52	53	34	63
	Often/Sometimes	62.5	22	50	43	41	32	45	33
	Rarely/Never	12.5	37.5	0	0	3	16	14	3
I like the way my meals are presented									
	Always	25	31	42	86	59	79	41	68
	Often/Sometimes	75	28	42	14	28	16	48	28
	Rarely/Never	0	16	0	0	3	5	3	3
The vegetables are too crisp									
	Always	0	6	8	0	17	16	0	68
	Often/Sometimes	62.5	19	33	0	28	26	45	28
	Rarely/Never	37.5	47	33	86	48	58	48	3
The hot foods are just the right temperature									
	Always	50	25	42	71	59	79	38	5
	Often/Sometimes	50	31	42	29	28	21	38	23
	Rarely/Never	0	34	8	0	10	0	7	70
I am able to choose the portion size of my meal									
	Always	0	28	58	57	41	89	48	48
	Often/Sometimes	25	28	17	43	31	0	21	47
	Rarely/Never	75	28	8	0	21	11	21	5
The vegetables are too soft									
	Always	12.5	16	8	14	7	0	10	58
	Often/Sometimes	37	22	50	29	39	21	52	22
	Rarely/Never	50	37.5	17	57	41	79	28	20

*Totals may not add to 100, due to rounding and/or missing data

Residents across facilities were predominantly happy with the dining room experience, including the quality of utensils and crockery, the meal times and the atmosphere in the dining room. There were some residents, however, who did not like the dining room atmosphere, those who needed more dining aids, or some who were not happy with the meal timetabling.

Table 6.5: The Dining Room Experience

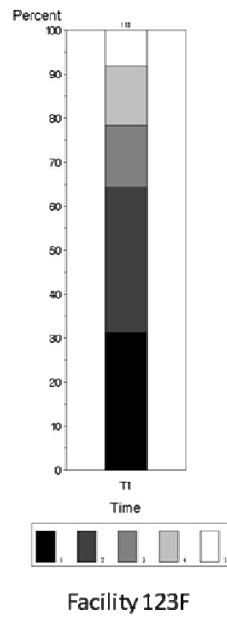
Facility		123F	197D	242G	386G	452D	519A	696A	764E
		%	%	%	%	%	%	%	%
I like the atmosphere in the dining room at mealtimes									
	Always	25	34	25	71	31	58	41	78
	Often/Sometimes	37.5	37.5	33	29	62	32	55	18
	Rarely/Never	25	16	17	0	3	11	0	3
The crockery and cutlery are chipped and/or stained									
	Always	0	12.5	8	0	10	0	3	0
	Often/Sometimes	62.5	22	42	29	14	5	17	28
	Rarely/Never	25	47	33	57	72	95	76	72
I am disturbed by noise in the dining area									
	Always	12.5	6	0	0	14	0	7	0
	Often/Sometimes	50	41	58	29	41	32	52	22
	Rarely/Never	25	37.5	33	71	45	68	38	78
The staff who serve my meals are neat and clean									
	Always	62.5	78	83	100	76	100	90	95
	Often/Sometimes	37.5	9	8	0	17	0	3	5
	Rarely/Never	0	3	0	0	0	0	0	0
The cutlery and dining aids I am given help me manage everything on my plate									
	Always	62.5	50	75	71	86	100	62	87
	Often/Sometimes	25	19	8	0	7	0	21	10
	Rarely/Never	0	12.5	0	0	0	0	3	2
The main meals are served at times that are good for me									
	Always	75	56	58	71	76	79	45	90
	Often/Sometimes	12.5	19	25	29	17	21	31	7
	Rarely/Never	12.5	12.5	0	0	0	0	0	3

*Totals may not add to 100, due to rounding and/or missing data

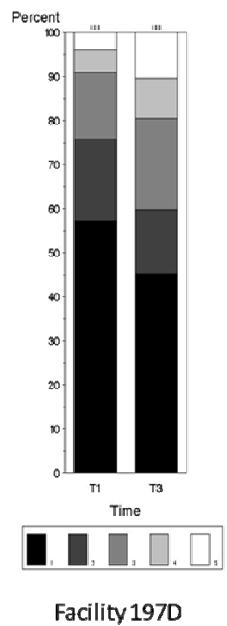
Figures 6.1a-i compare distribution of aggregate responses (mean of all items) for the food surveys for each facility at the time of Assessment 1 and Assessment 3. Responses range from Excellent (1) to Poor (5). Note, there was no second Food Services Survey for Facility 123F and 764E and there were no Food Services Surveys collected for Facility 834E where there was no hostel. Facilities 242G, 386G and 696A showed an improvement in Food Services Scores. Overall satisfaction with food services was similar at both time periods (Figure 6.2).

Figure 6.1a-i: Distribution of aggregate responses (mean of all items) for each facility.

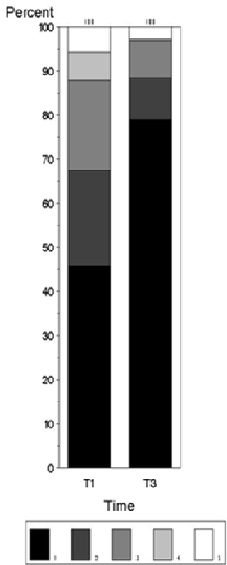
Food Service Survey – Distribution of responses Q1-26



Food Service Survey – Distribution of responses Q1-26

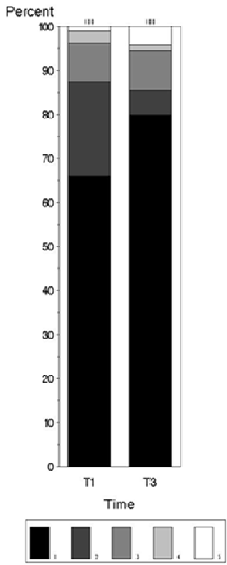


Food Service Survey – Distribution of responses Q1-26



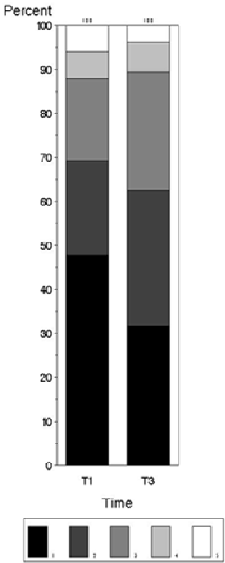
Facility 242G

Food Service Survey – Distribution of responses Q1-26



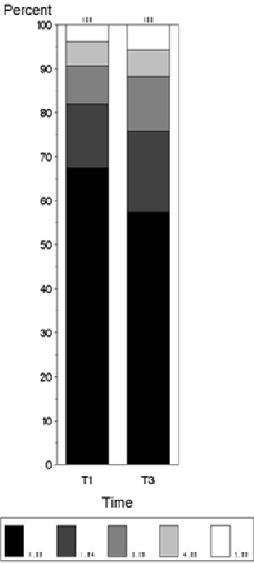
Facility 386G

Food Service Survey – Distribution of responses Q1-26



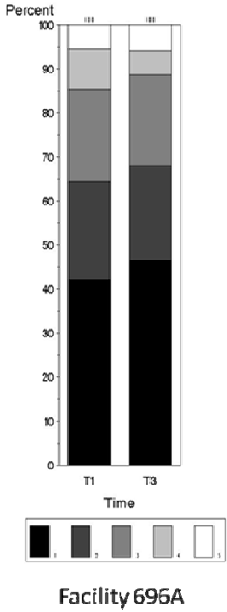
Facility 452D

Food Service Survey – Distribution of responses Q1-26



Facility 519A

Food Service Survey – Distribution of responses Q1-26



Food Service Survey – Distribution of responses Q1-26

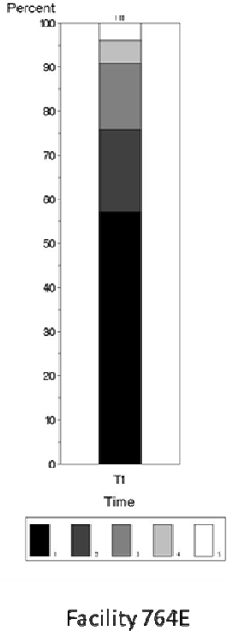
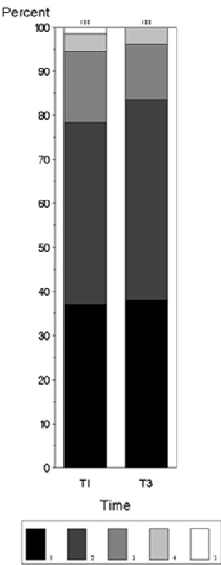


Figure 6.2: Overall satisfaction with food services across all facilities.

Food Service Survey – Overall Satisfaction



All Facilities

Encouraging Best Practice Nutrition and Hydration in Residential Aged Care

Appendix 7: Plate Waste Studies

The plate waste studies were undertaken at the request of participating facilities as part of their Nutrition Practice Development Plans. The studies were primarily used to inform the facilities as to food preferences and possible changes to menu options and servings, as well as the adequacy of nutritional intake for individual residents. However the data also provided useful insight into the residents' expressed preferences and nutritional intakes.

The studies were carried out across five of the facilities. The data collection was approved by the Human Research Ethics Committee of the University of Newcastle and with the informed consent of the individual residents involved. At each of the five sites, plate waste data were collected by trained Nutrition Assessors on two occasions (times T1 and T2). Each plate waste study was conducted over a 24 hour period, and included observations of breakfast, lunch, dinner, morning and afternoon tea and supper. In instances where there was not a structured time for supper, facility staff recorded any items consumed by residents during the night. Using a standardised tool developed by the University team.

At each meal, collection of plate waste data including the following steps:

A. Before Meals

1. Establishment of standard portion size for each meal

Three portions of each menu item were weighed on a digital scale (*Homemaker* 3Kg round glass top kitchen scale with tare wt function 0.001kg). Weights were expressed to the nearest 5 grams and recorded on a form. The mean weight of each item was calculated and used to compare with the standard serving size set by the facility. The purpose of assessing food weight was to quantify the amounts of all food items served to the residents. Menu items were also photographed to be used as the standard reference.

2. Assessment of tray accuracy

The level of accuracy in meal provision was monitored to ensure the written records were accurate. Records were amended for extra or missing items.

B. During Meals

The dining area was observed and records were made of any extra food items consumed by the residents.

C. After Meals

3. Estimation of Plate Wastage

Visual estimates of plate waste were made as each resident completed their meal. For each resident, the consumption of each food item was estimated to the nearest percentage using the method described by Sherwin et al. (see Table 7.1 below). Percentages were recorded onto standardised plate waste meal recording forms. Any additional food items, or other comments such as dining environment or noise level, were also recorded.

Information on food consumed between meals was collected from mid-meal lists and through discussion with facility staff.

The data collection method was modified for the second round of plate waste studies. At T2, recording forms were preprinted with menu items. Further, ethics approval was gained to match resident's anthropometric measures to the plate waste data.

Table 7.1: Visual plate waste scores used by observers, score description, and percentage of serve size *

Score	Description	Percentage
0	None left	0
+m	One mouthful left	10
1/4	¼ left	25
½	½ left	50
¾	¾ left	75
-m	One mouthful eaten	90
All	All left	100

*Sherwin AJ, Nowson CA, McPhee J, Alexander JL, Wark JD, Flicker L. Nutrient intake at meals in residential care facilities for the aged: validated visual estimation of plate waste. *Australian Journal Nutrition and Dietetics*. 1998; 55:188-193.

Data Analysis

Data were tabulated on an Excel spreadsheet using food nutrient information from the *Ausnut 2007* database (Food Standards Australia New Zealand) and plate waste data from individual sites. Energy requirements and references were estimated using the Schofield equation, and protein requirements were estimated on a basis of 1g/kg/day.

Results

Figure 7.1 shows mean percentage plate waste for each unit in each facility for T1 and T2. While there was variation across sites and units, there was a trend for T2 plate waste to be lower than T1 in all facilities ($T=3.41$, $P=0.011$, $df=7$).¹ However, it should be noted that some plate waste is desirable. Ideally plate waste should be between 5-20%. Low plate wastes indicate that residents may not have enough to eat; high plate wastes indicate that residents may not like a particular meal item or may have poor appetites at these meal times.

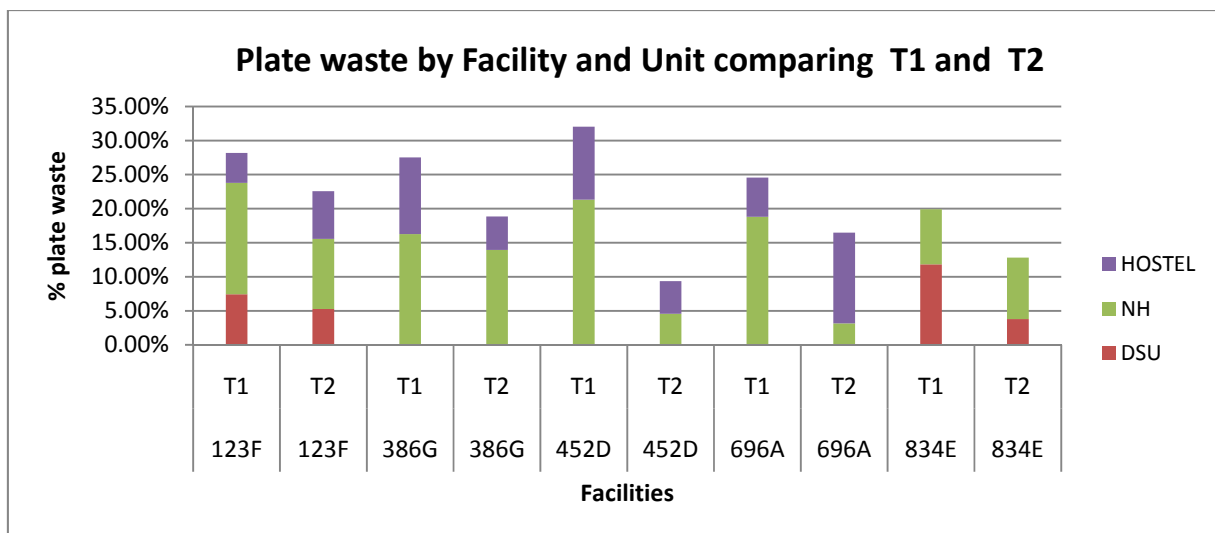
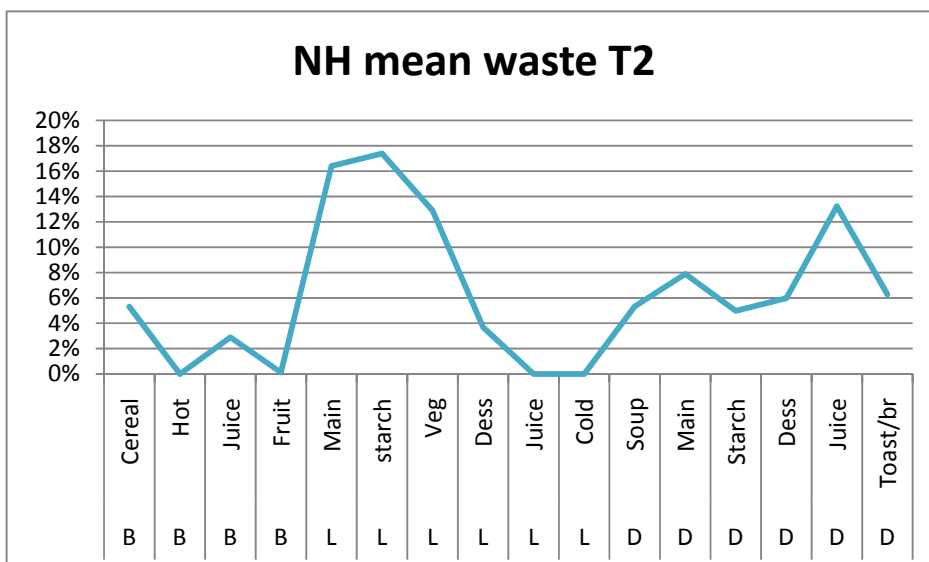
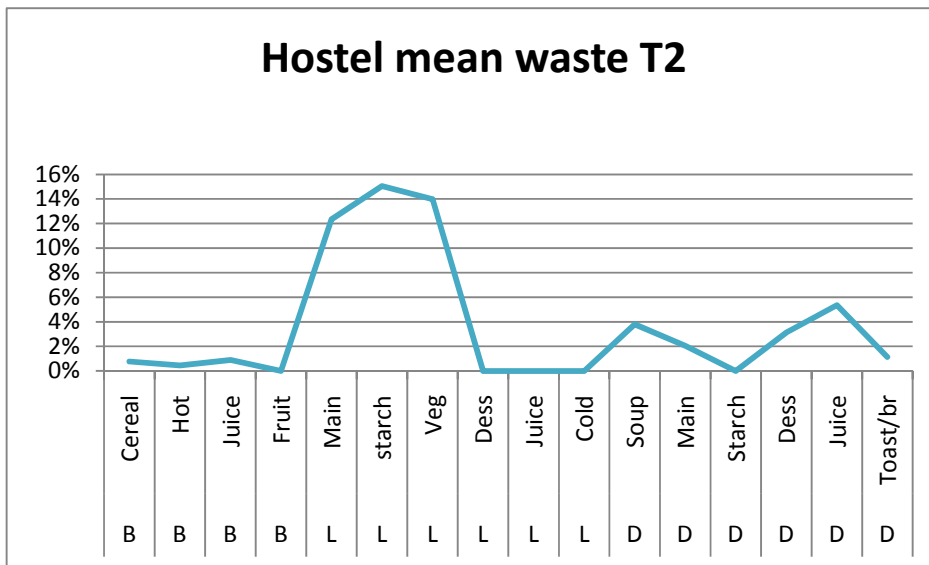
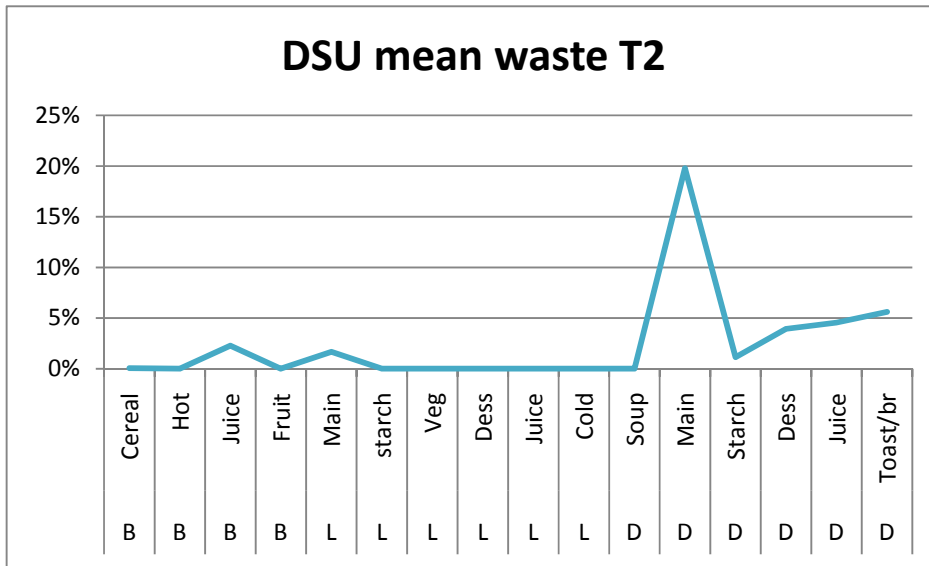


Figure 7.1: Variation in mean percentage plate waste across sites and units (T1 and T2).

¹ Since there were changes to the recording of plate wastes at supper between T1 and T2, the comparisons were repeated omitting supper data from the analyses. There was no substantial difference in the results.

Figures 7.3a-c show the mean percentage plate waste (averaged across all facilities) for items within each meal, for hostels (4 units, Fig. 7.3a) nursing home units (5 units, Fig. 7.3b) and DSU (5 units, Fig. 7.3c). These figures show very low plate waste for cereal, hot breakfasts, fruit, juice, cold lunch options and dessert. The data indicate that servings of these food items could be increased. Higher plate wastes are seen for lunch (main, starch and vegetables) and dinner options. These options could be further reviewed to assess their fit with patient preferences and appetite.





Figures 7.3a-c: Mean percentage plate waste for items within each meal, for hostels (4 units, Fig. 7.3a) nursing home units (5 units, Fig. 7.3b) and DSU (5units, Fig. 7.3c).

These plate waste data were provided to each facility showing the mean percentage plate waste for all residents in each unit, and also for each resident. The results were discussed at the nutrition meetings.

By combining plate waste data, with weighed food references and information from the *Ausnut* database, it was possible to estimate the energy and protein intakes for each resident. Figure 7.4 provides the mean 24 hour energy intake (averaged across all sites). The green line shows the expected intake for a 50kg inactive female and the blue line shows the expected intake for an 80kg inactive male. The red line shows the mean intake at T1, and the purple line shows the improvement in energy intakes at T2.

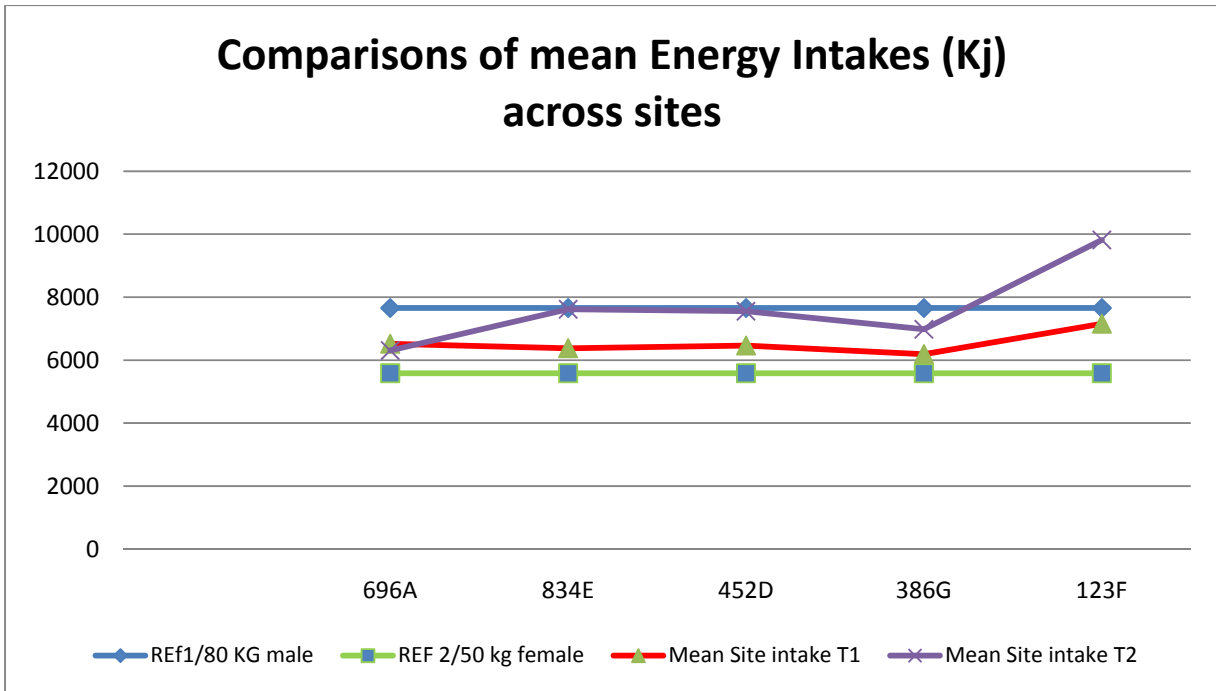


Figure 7.4: provides the mean 24 hour energy intake (averaged across all sites).

Figure 7.5 shows similar energy intake data for individual residents within one facility. This information shows the variation between residents and was also provided to facilities to identify individual residents with particularly low intakes. In this plot, the mean for the site is indicated by the yellow line. The two blue lines are the reference lines for a 50kg female and 80kg male, respectively.

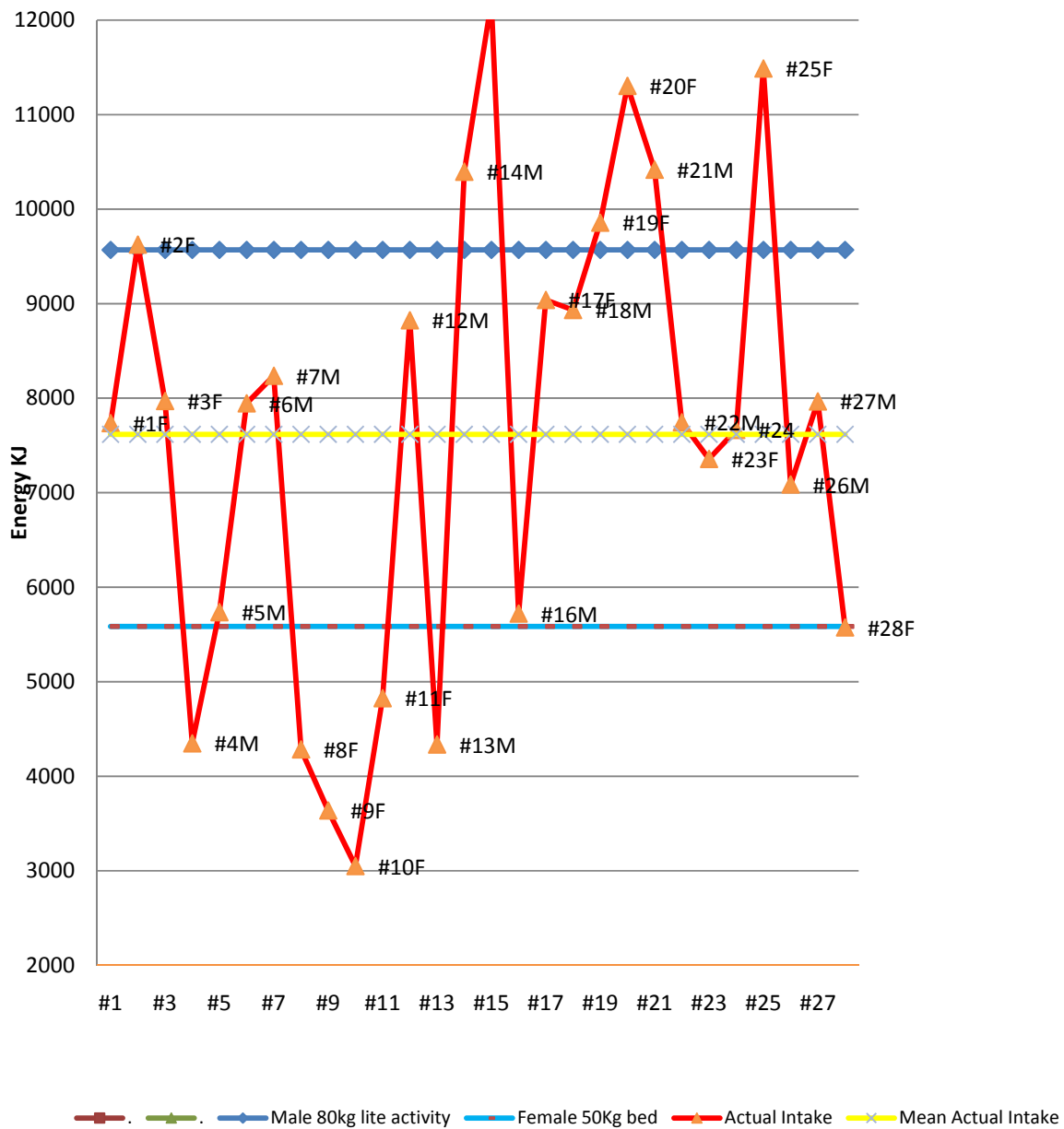


Figure 7.5: Energy intakes for individual residents.

In Figure 7.6 individual resident's BMIs are also considered in estimating the adequacy of energy intake. The red line shows each resident's BMI expressed as a percentage of the reference BMI of 25 (data for one facility). The blue line shows each resident's energy intake calculated as a percentage of the estimated requirement for their individual BMI. A number of residents in this facility were considered to have very low energy intakes in that they had low BMI and low percentage energy intake for their BMI.

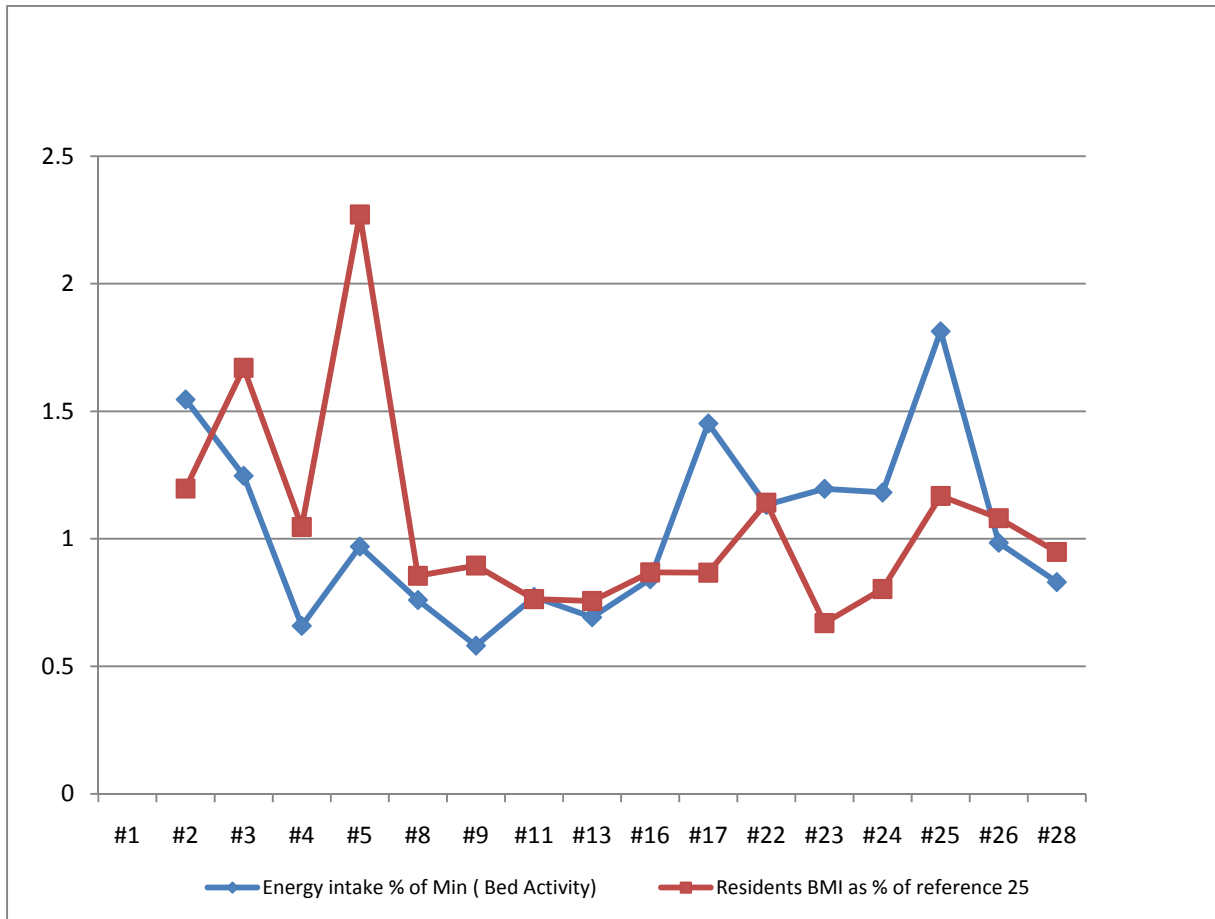


Figure 7.6: Resident's BMI expressed as a percentage of the reference BMI of 25 (red line), and resident's energy intake calculated as a percentage of the estimated requirement for their individual BMI (blue line).

Mean energy intakes (averaged across all facilities) did increase from T1-T2 ($T = -2.93, P = 0.004, df = 293$).

Figure 7.7 shows the mean estimated protein intake for individual residents in some facilities and the expected intakes for residents (1g/kg). The figure identifies some residents who had particularly low intakes. These data were provided to the facilities and discussed at the nutrition meetings.

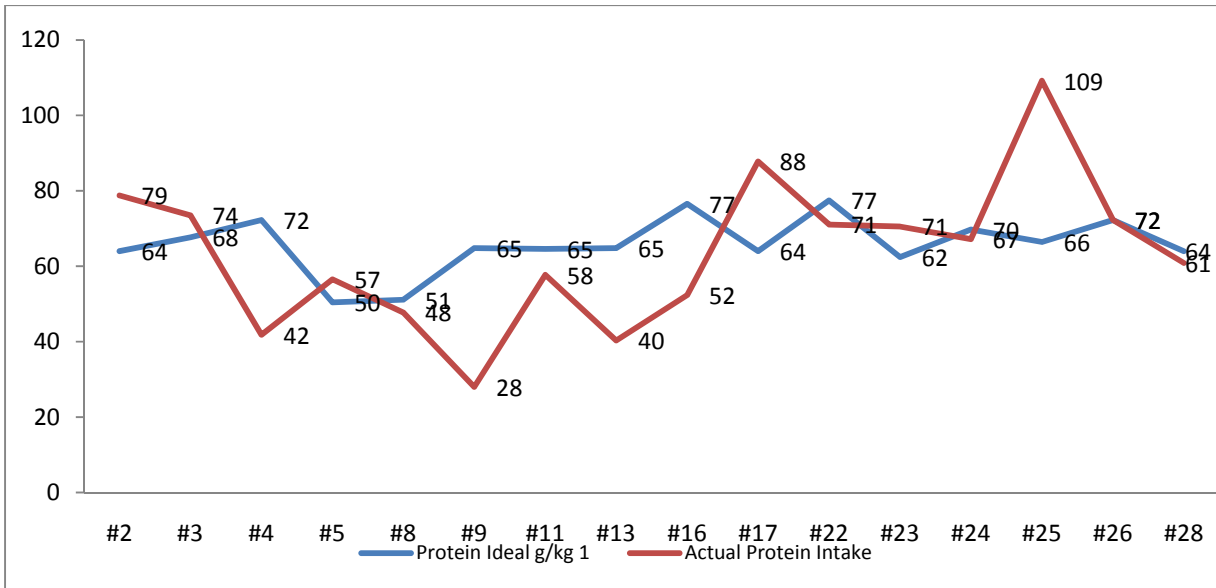


Figure 7.7: Estimated protein intake for each resident (red line) and expected intake (1g/kg – blue line).

Appendix 8: Dissemination

Abstracts of Approved Conference Presentations

IMPLEMENTING BEST PRACTICE IN NUTRITION AND HYDRATION SUPPORT IN RESIDENTIAL AGED CARE: SOME FINDINGS FROM A PILOT STUDY.

Oral presentation, Australian Association of Gerontology National Conference, Fremantle, 18-21 November 2008.

Parkinson L, Byles J, Capra C, Perry L, Brookes J.

Issues: In Australia, the prevalence of protein energy malnutrition in institutionalised older people ranges from 25 – 65%. Clinical outcomes related to malnutrition include reduced cognitive function, fractured neck of femur, pressure sores, impaired immune response, and complications following acute illness. Evidence suggests that improvements in nutrition and hydration of residents produce lower infection rates, fewer falls, better quality of life for residents, and fewer demands on health services. However, implementation of change within healthcare practice is a complex process; provision of guidelines alone has been shown to have limited effectiveness. The implications for residents' quality of life, staff resources and costs of care are broad and complex. Participatory Action Research (PAR) has been advocated as a means to both effect change and research innovation in healthcare delivery and organisation. Extensively used in a wide variety of acute healthcare settings, it has also been successfully applied in research and practice development programmes in aged care facilities.

Discussion: We are currently putting into action a PAR project to support the development and implementation of best practice nutrition and hydration in nine NSW aged care facilities. In each facility, topics will be locally chosen, based on best practice protocols developed by nutritionists Rudi Bartl and Carolyn Bunney from Central Coast Area Health Service. The overall evaluation assesses the: 1.Processes involved in the best practice approach(es) chosen and implemented by staff; 2.Changes in nutrition and hydration care processes; and 3.Changes in nutritional status of participating residents. This paper will present some preliminary findings from the pilot facility involved in this project. The topic for intervention in this pilot facility is person-centred care in nutrition.

Conclusions: The paper will report on baseline nutrition status and changes to nutrition practice and nutritional status across the 32 week pilot study.

IMPLEMENTING BEST PRACTICE IN NUTRITION AND HYDRATION SUPPORT IN RESIDENTIAL AGED CARE (1): EXPLOITING CONCEPTUAL SYNERGIES AS CHANGE MANAGEMENT STRATEGY - PARTICIPATORY ACTION RESEARCH AND PERSON CENTRED CARE.

Poster presentation, Australian Association of Gerontology National Conference, Fremantle, 18-21 November 2008.

Perry L, Byles J, Capra S, Parkinson L, Bellchambers H, Howie A, Penning C.

Issues: In 2004 13% of Australia's population were aged 65 years and over, 1.5% aged 85 years plus. This is projected to increase to 26-28% and 6–8%, respectively, by 2051. Care of the frail elderly is a policy priority for today and tomorrow's elders, encompassing quality as well as quantity of service delivery. The Residential Aged Care Program requires facilities to meet care standards for accreditation. However, Commonwealth and organisational aspirations are for more than an acceptable level of service delivery, and for practice development to achieve 'best practice'. Participatory Action Research (PAR) has been advocated as a means to both effect change and research innovation in healthcare delivery and organisation (1), based on collaborative enquiry and mutual learning between researchers and participant clinicians. Extensively used in acute healthcare settings, this approach is much less common in aged care facilities.

Discussion: We are currently implementing a PAR project to support development and implementation of best practice nutrition and hydration in 9 NSW aged care facilities; four in an organisation espousing Person-

Centred Care (PCC; 2). This approach values and respects the personhood of individuals, and uses this as the premise for all intervention. We are exploring whether and how characteristics and synergies between PAR and PCC may be exploited to support engagement with a practice development agenda, identification of topics of enquiry, methods of care process change and practice development, and support sustainability of innovation.

Conclusions: The paper provides early results of this innovative approach, reporting on research and practice development processes, how PAR and PCC were implemented, and to what extent change in nutritional practice occurred across the 32 week intervention at the pilot site, a 65-bed co-located facility.

1. Greenhalgh T et al 2004. How to Spread Good Ideas. NCCSDOR&D.
2. Kitwood T. 1997. Dementia Reconsidered. OUPress, Buckingham.

IMPLEMENTING BEST PRACTICE IN NUTRITION AND HYDRATION SUPPORT IN RESIDENTIAL AGED CARE: RESIDENT QUALITY OF LIFE AS AN OUTCOME.

Oral presentation, Australian Association of Gerontology Rural Conference: Ageing in a Changing Environment, Broken Hill, 1-2 April 2009.

Oral presentation, Aged&Community Services Association NSW&ACT Conference, Sydney, June 2009.

Parkinson L, Byles J, Capra S, Perry L, Bellchambers H, Moxey A, Brookes J.

This team is currently implementing and evaluating a Participatory Action Research project, funded by the Australian Government Department of Health and Ageing under the Encouraging Best Practice in Residential Aged Care (EBPRAC) Program, to support development and implementation of best practice nutrition and hydration in nine aged care facilities throughout NSW. In each facility, project activities are locally chosen, based on best practice guidelines, with sustainability as an important consideration.

The baseline prevalence of moderate to severe protein energy malnutrition for residents in the project facilities ranged from 25% to 71%, as measured by Patient Generated Subjective Global Assessment, revealing some scope for working with facilities to improve nutrition status. Project activities implemented to date have included both individual and systems-based strategies.

There is good evidence that improvements in nutrition and hydration of residents can have multiple positive impacts for residents. However, promoting healthcare practice change is complex, and the implications for residents' quality of life must also be considered, both as an important outcome for nutrition improvement and for its own sake.

The paper will report on baseline quality of life and changes to quality of life to date for residents participating in this project, using the DEMQoL measure.

DOES THE PARIHS FRAMEWORK 'WORK' FOR AGED CARE? THE EBPRAC NUTRITION AND HYDRATION PROJECT.

National Australian Conference on Evidence-Based Clinical Leadership, Adelaide, 27-29 May 2009.

Lin Perry, Helen Bellchambers, Andrew Howie, Annette Moxey, Lynne Parkinson, Sandra Capra, Julie Byles.

Background:

Implementation of evidence into practice challenges healthcare providers and clinicians and academics acknowledge the inherent complexity and uniqueness of all such processes [1]. Models have been developed to assist clinicians to strategize practice and service development, including the Promoting Action on Research Implementation in Health Services (PARIHS) framework [2]. Extensively studied in acute services, there is currently little evidence how and whether PARIHS can be applied in residential aged care. However, given the ageing profile of Australian and international populations, it is increasingly important to ensure that care for older adults incorporates current best evidence. This is the aim of the Encouraging Best Practice in Residential Aged Care (EBPRAC) project in Nutrition and Hydration Support. This component explores the relevance and 'fit' of the PARIHS framework as an aid to practice change in this setting.

Methods:

As part of a 'diagnostic' phase, interviews and 3 focus groups were conducted with 26 key staff involved in the project in 3 facilities from one organisation in New South Wales in 2008. Semi-structured interviews lasted 20-90min each, focus group meetings 60-100 min; data were transcribed and analysed by two independent researchers using thematic analysis and NVivo8, seeking to codify material according to its fit or otherwise within the PARIHS framework.

Findings

We will pre-code nodes and explore the extent to which data are accommodated within themes of:

1. Evidence

- i) Research
- ii) Local data / information / audits
Systematic collection
Structured reflection / evaluation / application

2. Experience

- iii) Clinical experiences
- iv) Resident's experiences

3. Context of care

- v) Forms of evaluation
- vi) Facilitator
- vii) Values and beliefs
- viii) Leadership
- ix) Receptiveness to change
- ix) Culture of the organization

We will demonstrate the extent to which these themes are reflected, or additional areas not addressed by this framework, in aged care staff's discussions of methods, supports and barriers to practice development at their facilities.

Conclusion

This is the first study to explore and demonstrate the 'fit' of PARIHS within the aged care sector.

This project is funded by the Australian Government Department of Health and Ageing under the EBPRAC Program

References

1. Kitson A.L. (2008) The need for systems change: reflections on knowledge translation and organizational change. *Journal of Advanced Nursing* 2008, 65, 1, 217-28
2. Rycroft-Malone J , Harvey G, Seers K, Kitson A, McCormack B & Titchen A (2004) An exploration of the factors that influence the implementation of evidence into practice. *Journal of Clinical Nursing* 13, 913-924

RESEARCH FOR AGED CARE – A BOLD FRONTIER FOR HEALTH RESEARCH

QLD APS Psychology and Ageing interest group, School of Psychology, University of Queensland, 19 August 2009.

Julie Byles

As the population ages, the needs for aged care are likely to increase. It is also likely that people's expectations of care will change rapidly over the next few decades. There is a critical need for applied research that enables aged care to meet the needs of increasing numbers of older people.

To date there has been a limited amount of research into aged care, but this is a rapidly emerging field. The aged care research agenda is being increasingly well defined, and includes strategies to monitor and improve the quality of life of clients, identify and meet workforce needs, enhance practice development, and enable organisational change. This presentation will discuss the emerging aged care research agenda and will highlight some recent research in residential aged care including the development of instruments for the measurement of quality of life among aged care residents. The Enhancing Best Practice in Nutrition and Hydration project which is funded by the Department of Health and Ageing under the Encouraging Best

Practice in Residential Aged Care (EBPRAC) program, will be discussed as one example how quality of life can be effectively assessed in aged care settings with a view to facilitating best care.

IMPLEMENTING BEST PRACTICE IN NUTRITION AND HYDRATION SUPPORT IN RESIDENTIAL AGED CARE: CHANGE IN RESIDENT NUTRITION STATUS.

Nutrition Society of Australia & Nutrition Society of New Zealand 2009
Joint Annual Scientific Meeting, Newcastle, 8-11 December, 2009.

Julie Byles, Lynne Parkinson, Lin Perry, Sandra Capra, Annette Moxey, Helen Bellchambers.

Background: Adequate nutrition and hydration is essential for physical and mental performance, recovery and rehabilitation - it can reduce adverse health outcomes such as wounds, falls, urinary tract infections, constipation, dehydration, and delirium for older people.

Objective: A collaborative team from the University of Newcastle, Uniting Care Ageing and Baptist Community Services is undertaking an action research project to support implementation of best practice nutrition and hydration in nine aged care facilities throughout NSW, funded by the Australian Government Department of Health and Ageing under the Encouraging Best Practice in Residential Aged Care (EBPRAC) Program.

Design: In each facility, project activities were locally chosen, based on identified needs and Best Practice Guidelines, with sustainability as an important consideration. Best Practice Guidelines acted as a guide and resource for facility staff, while action research methods encouraged facility staff to develop an approach to best practice that fits into daily routines at minimal cost, with processes that suit individual facility needs. For up to 50 residents in each facility, the team assessed nutrition status at three time points, using several measures including: PGSGA; MST, BMI, other anthropometric measures and tetra-polar bioelectrical impedance.

Outcomes: For the first six facilities in the project, the baseline prevalence of moderate to severe protein energy malnutrition for residents ranged from 25% to 71%, revealing some scope for working with facilities to improve nutrition status. Follow-up data collection will be completed in September 2009. However, preliminary follow-up for four completed facilities have shown little positive change in nutrition status measures.

Conclusion: The effect of best practice implemented using action research methods will be discussed from the findings across the nine facilities.

IMPLEMENTING BEST PRACTICE IN NUTRITION AND HYDRATION SUPPORT IN RESIDENTIAL AGED CARE: DEMQOL AS A QUALITY OF LIFE MEASURE.

First Joint Conference of the Australian Psychological Society Psychology & Ageing Interest Group (PAIG) and the Royal Australia/New Zealand College of Psychiatrists (RANZCP) Faculty of Psychiatry of Old Age (FPOA), Gold Coast, 12-14 November, 2009.

Lynne Parkinson, Lin Perry, Helen Bellchambers, Annette Moxey, Julie Brookes, Andrew Howie, Lucy Gallienne, Richard Gibson, Julie Byles, Sandra Capra.

Introduction: There is good evidence that improvements in nutrition can have multiple positive impacts for residents in aged care. However, promoting healthcare practice change is complex, and the implications for residents' quality of life must also be considered, both as an important outcome for nutrition improvement and for its own sake. While there is a plethora of measures of quality of life, none is demonstrably suitable for this setting. To be most useful, a measure must be brief, psychometrically sound, easy to use, have face validity with clinicians, and be free to use. The DEMQoL tool scores well on most of these essentials, but is as yet untested in practice. This paper explores the utility of DEMQoL as a measure of quality of life in the residential aged care setting.

Methods: This team is currently implementing and evaluating a Participatory Action Research project, funded by the Australian Government Department of Health and Ageing under the Encouraging Best

Practice in Residential Aged Care (EBPRAC) Program, to support development and implementation of best practice nutrition and hydration in nine aged care facilities in NSW. In each facility, project activities are locally chosen, based on best practice guidelines, with sustainability as a key feature. Project activities implemented to date have included both individual and systems-based strategies. Resident quality of life is being measured using DEMQoL, for a cohort of 20-50 residents per facility on three occasions across the course of the project.

Results: The baseline prevalence of moderate to severe protein energy malnutrition for residents in project facilities ranged from 25% to 71%, as measured by Patient Generated Subjective Global Assessment, revealing some scope for working with facilities to improve nutrition status. At baseline, DEMQoL scores varied across facilities, with mean scores from 88 to 97, and median scores from 92 to 100. DEMQoL scores also exhibited an equivocal relationship with the nutrition outcome measure (PGSGA).

Discussion: This paper will discuss the utility of DEMQoL to measure change in quality of life in the residential aged care setting, and explore benchmarks for clinical change. Final results will be available in October 2009.

IMPLEMENTING BEST PRACTICE IN NUTRITION AND HYDRATION SUPPORT IN RESIDENTIAL AGED CARE: CHANGE IN A RESIDENT QUALITY OF LIFE SCORE.

AAG National Conference in Canberra, 25-27 November, 2009.

L Parkinson, S Capra, L Perry, H Bellchambers, A Moxey, J Brookes, A Howie, L Gallienne, R Gibson, J Byles

This team is currently implementing and evaluating a Participatory Action Research project, funded by the Australian Government Department of Health and Ageing under the Encouraging Best Practice in Residential Aged Care (EBPRAC) Program, to support development and implementation of best practice nutrition and hydration in nine aged care facilities throughout NSW. In each facility, project activities are locally chosen, based on best practice guidelines, with sustainability as a key feature.

The baseline prevalence of moderate to severe protein energy malnutrition for residents in the project facilities ranged from 25% to 71%, as measured by Patient Generated Subjective Global Assessment, revealing some scope for working with facilities to improve nutrition status. Project activities implemented to date have included both individual and systems-based strategies.

There is good evidence that improvements in resident nutrition can have multiple positive impacts for residents. However, promoting healthcare practice change is complex, and the implications for residents' quality of life must also be considered, both as an important outcome for nutrition improvement and for its own sake. Resident quality of life is being measured using DEMQoL, a tool suitable for people with dementia, appropriate for the setting, brief, psychometrically sound, and free to use.

At baseline, DEMQoL scores varied across facilities, with mean scores from 88 to 97, and median scores from 92 to 100. DEMQoL scores also exhibited an equivocal relationship with the nutrition outcome measure (PGSGA). This paper will report on changes to quality of life measured by DEMQoL and the relationship of this change to changes in nutrition status, at follow-up assessment.

IMPLEMENTING BEST PRACTICE IN NUTRITION AND HYDRATION SUPPORT IN RESIDENTIAL AGED CARE: STAFF EXPERIENCES OF PARTICIPATORY ACTION RESEARCH AND SUSTAINABILITY OF PRACTICE CHANGE.

AAG National Conference in Canberra, 25-27 November, 2009.

L Perry, L Parkinson, S Capra, H Bellchambers, A Moxey, A Howie, J Byles

This team is currently implementing and evaluating a Participatory Action Research project, funded by the Australian Government Department of Health and Ageing under the Encouraging Best Practice in

Residential Aged Care (EBPRAC) Program, to support development and implementation of best practice nutrition and hydration in nine aged care facilities throughout NSW. In each facility, project activities are locally chosen, based on best practice guidelines, with sustainability as a key feature.

Sustainability of change is a key factor for the EBPRAC programme. Poor sustainability is a recognized hazard of project work, where new technologies and practices are introduced as part of time-limited projects without adequate attention to ensure they are embedded in routine care prior to project completion and withdrawal of project staff from the field. Various strategies have been proposed to ensure sustainability, including use of participatory working as a means to ensure local engagement of staff, and hence ownership of project activities. This team chose to use a Participatory Action Research framework (PAR) as a means to, 'describe, interpret and explain social situations while executing a change intervention aimed at improvement and involvement'. In each facility we aimed to, 'set up a group activity with an explicit critical value basis ... founded on a partnership between action researchers and participants, all of whom are involved in the change process'. We intended the experience to be 'educative and empowering'¹.

Using qualitative data derived from staff interviews and PAR meetings, audiotaped, transcribed and analysed using NVivo 8 and thematic analysis, we will present staff reported experiences of this process and examine design effects in relation to project sustainability at each facility.

¹ Waterman H, Tillen D, Dickson R, de Koning K. Action research: a systematic review and guidance for assessment. *Health Technology Assessment* 2001;5: 23. Accessed at <http://www.ncchta.org/execsumm/summ523.shtml>

IMPLEMENTING BEST PRACTICE IN NUTRITION AND HYDRATION SUPPORT IN RESIDENTIAL AGED CARE: STAFF PERCEPTIONS OF CONTEXTUAL INFLUENCES ON PRACTICE CHANGE.

AAG National Conference in Canberra, 25-27 November, 2009.

L Perry, L Parkinson, S Capra, H Bellchambers, A Moxey, A Howie, J Byles

This team is currently implementing and evaluating a Participatory Action Research project, funded by the Australian Government Department of Health and Ageing under the Encouraging Best Practice in Residential Aged Care (EBPRAC) Program, to support development and implementation of best practice nutrition and hydration in nine aged care facilities throughout NSW. In each facility, project activities are locally chosen, based on best practice guidelines, with sustainability as a key feature.

Effecting change within routine daily clinical practice can be challenging; recommendations for development of strategies to effect this indicate that multi-factorial approaches tailored to the characteristics of the context, participants and topic are most likely to succeed. A number of frameworks to guide planning and evaluation of change management have been proposed: within healthcare settings; the Promoting Action on Research Implementation in Health Services (PARIHS) framework has been used extensively, and our group have demonstrated its utility within aged care settings¹. One component of PARIHS focuses on contextual factors, such as local culture, teamwork, leadership, organizational systems, feedback and evaluation².

Using qualitative data derived from staff interviews and PAR meetings, audiotaped, transcribed and analysed using NVivo 8 and thematic analysis, we will present staff perceptions of contextual influences upon their ability and success in effecting changes in line with best practice guidelines in these nine facilities within two major provider organisations.

¹ Perry L, Bellchambers H, Howie A, Moxey A, Parkinson L, Capra S, Byles J. Does the PARIHS framework 'work' for Aged Care? The EBPRAC Nutrition and Hydration Project. Joanna Briggs Institute National Conference. Evidence-Based Clinical Leadership. Adelaide, May 2009.

² Rycroft-Malone J. PARIHS – a framework for guiding the implementation of evidence-based practice. *Journal of Nursing Care Quality* 2004, 19,4,297-304.

IMPLEMENTING BEST PRACTICE IN NUTRITION AND HYDRATION SUPPORT IN RESIDENTIAL AGED CARE: RESIDENT QUALITY OF LIFE AS AN OUTCOME.

Aged&Community Services Association NSW&ACT Update (October Edition)

Lynne Parkinson, Annette Moxey, Julie Byles, Lin Perry, Helen Bellchambers, Julie Brookes, Sandra Capra.

Adequate nutrition and hydration is essential for physical and mental performance, recovery and rehabilitation - it can reduce adverse health outcomes such as wounds, falls, urinary tract infections, constipation, dehydration, and delirium. Nutrition also adds to quality of life - food is one of life's great pleasures.

A project team lead by Professor Julie Byles (University of Newcastle), is currently working with Uniting Care Ageing and Baptist Community Services to undertake an action research project that supports the implementation of best practice nutrition and hydration in nine aged care facilities throughout NSW. The Nutrition and Hydration project is funded by the Australian Government Department of Health and Ageing under the Encouraging Best Practice in Residential Aged Care (EBPRAC) Program. In each facility, project activities are locally chosen, based on identified needs and Best Practice Guidelines,¹ with sustainability as an important consideration. The Best Practice Guidelines act as a guide and resource for facility staff, while the action research methodology encourages facility staff to develop an approach to best practice that fits into daily routines at minimal cost, with processes that suit individual facility needs.

While there is good evidence that improvements in nutrition and hydration of aged care residents can have multiple positive impacts, promoting healthcare practice change is complex, and the implications for residents' quality of life must also be considered, both as an important outcome for nutrition improvement and for its own sake. The Nutrition and Hydration project will assess change in quality of life of residents as an important outcome. The project will also assess changes in residents' nutrition and hydration status, describe the process of nutrition and hydration practice change, and produce a set of education materials for Australian residential aged care facilities.

So, for up to 50 residents in each facility, the team is assessing quality of life (using the DEMQoL and DEMQoL Proxy tools²) and nutrition status (using the Patient Generated Subjective Global assessment [PGSGA] tool³). For the first six facilities in the project, the baseline prevalence of moderate to severe protein energy malnutrition for residents ranged from 25% to 71%, revealing some scope for working with facilities to improve nutrition status.

Deciding upon a quality of life tool in this setting was not an easy decision. After a concerted search of quality of life tools, the DEMQoL and DEMQoL Proxy measure were chosen because they are suitable for people with Dementia (a large proportion of this group of people), appropriate for the residential aged care setting, brief (29 items for the DEMQoL and 32 items for the DEMQoL Proxy), psychometrically sound, recommended by others in the field,⁴ and (importantly) free to use. We now have baseline findings on quality of life for the first six facilities.

First a little about the residents. Only consenting residents were assessed, including people with dementia, but not those who were too unwell on the day. Across facilities, 35% to 61% of residents agreed to be assessed (190 residents overall, 19 to 44 in each facility). Not surprisingly, the majority (60% or more) were women. For five of the six facilities, predominantly the older residents (over 85 years) agreed to be assessed.

The DEMQoL tool is answered by residents, scores can range from 28 to 112, and a higher score means better quality of life. Across the six facilities, average scores ranged from 88 to 97 (for 125 residents overall, 7 to 36 per facility). These seem like good levels but, as yet, there are no published studies that have used this tool in residential aged care, so, we can't make any comparisons or be sure that this level is really good. The DEMQoL Proxy is answered by a facility staff member, as this is used for people with dementia, scores can range from 31 to 124, and again, a higher score means better quality of life. Across the six facilities, DEMQoL Proxy average scores ranged from 90 to 105 (for 57 residents overall, 3 to 14 per facility), which was higher than the DEMQoL averages. As yet, we can't compare DEMQoL Proxy with DEMQoL scores, but we plan to be able to do this soon.

To see how quality of life was related to nutrition status (PGSGA), we looked at how change in DEMQoL was related to change in PGSGA from assessment 1 to assessment 2. Ideally, we would expect DEMQoL to increase as PGSGA decreases, and if PGSGA increased, we would expect DEMQoL to decrease. However, the story was much more complex than that, which only 17 (of 49) residents showing the expected relationship for these two measures. Clearly, this relationship warrants further investigation.

In summary, both DEMQoL and DEMQoL proxy mean scores varied across facilities, with DEMQoL Proxy consistently higher than DEMQoL. There are currently no population norms for DEMQoL, and no published data using this tool in residential aged care, so we cannot compare our findings with others or be sure that these levels are either high or low. The relationship between DEMQoL and nutrition status was not a simple one, and this needs to be looked at more closely. We acknowledge that only a small number of residents were assessed in each facility, and at assessment 2, some people had moved from DEMQoL to DEMQoL Proxy, meaning we could not interpret change between assessments. What is clear is that it is critical we have a reliable measure of quality of life in this setting. DEMQoL may be this measure, but this is yet to be established. We hope our final findings can add to the evidence in deciding if this is the case.

¹ Bartl R, et al. *Best practice food and nutrition manual for aged care facilities : addressing nutrition, hydration and catering issues / written by Rudi Bartl and Carolyn Bunney* Central Coast Health, Gosford, NSW: 2004.

² Banerjee S, et al. Quality of life in dementia: more than just cognition. An analysis of associations with quality of life in dementia. *J. Neurol. Neurosurg. Psychiatry* 2006;77:146-148

³ Bauer J, et al. Use of the scored Patient-Generated Subjective Global Assessment (PG-SGA) as a nutrition assessment tool in patients with cancer. *European J Clin Nutrition* 2002;56:779-785.

⁴ Sansoni J, et al. *Final Report: Dementia Outcomes Measurement Suite Project*. Centre for Health Service Development, University of Wollongong, Wollongong NSW: 2007.

To all *UnitingCare* residents and staff

From the University of Newcastle Nutrition Project Team

Wishing each of you a very happy Easter time



Residents, their families and friends, and staff at *UnitingCare* facilities in NSW have continued to work with us this year to find out how facilities can make mealtimes better. We really appreciate your continued teamwork with this project.

We have already learned that sometimes very small changes can make meal times much more satisfying. Residents at some facilities have made a booklet of their favourite recipes, and a couple of their favourites are on page 4. We are learning many ways to make meal times better for residents. So thank you from all of us – we are looking forward to working with you for the rest of this year, and helping to make meal times better for all older Australians in residential aged care.



Julie Byles



Director, RCGHA, University of Newcastle
On behalf of Sandra Capra, Lynne Parkinson,
Lin Perry, Helen Bellchambers, Andrew Howie, Annette Moxey,
Nicole Murphy and the Project Team

DID YOU KNOW?

Chocolate Easter eggs are full of energy and good for older people too

SOME GOOD IDEAS FROM FACILITY STAFF

Staff at facilities have come up with clever ideas to make mealtimes better for residents. Some have decided to:

- Ask residents to “taste test” foods from new suppliers
- Review current menu plans
- Cook fresh bread
- Assess new menu plans for nutritional balance

Staff at some facilities suggest:

- Offer at least two choices for the main dish
- Provide more variety for those on texture modified diets
- Listen to Catering Committee and residents suggestions when thinking about menu changes
- Look at the progress of meals from raw food to resident plate and fix up any quality issues
- Seek expert advice (Lottie Stewart Hospital in Sydney) to enhance moulded food meals for residents on puree diets
- Set up a routine to record resident’s nutritional status on admission and to flag when residents are not well nourished

We hope that both residents and staff are enjoying the opportunity this project has given them to think about some simple changes that could be made to make meal times more enjoyable for residents (and staff too).



WHAT RESIDENTS TOLD US

When we asked, most residents across all facilities told us that the food service at their facility was either very good or good.

Most Residents surveyed were happy with their dining room experience, including the quality of utensils and crockery, the meal times and the atmosphere in the dining room, though some residents told us they needed **more dining aids**, and would like **more choice** about when meals were served.

Most residents felt they received enough food and were not hungry after or between meals. But, some residents felt they were not given enough choices about the food they ate. Most residents told us they could not always have **snacks** when they wanted.

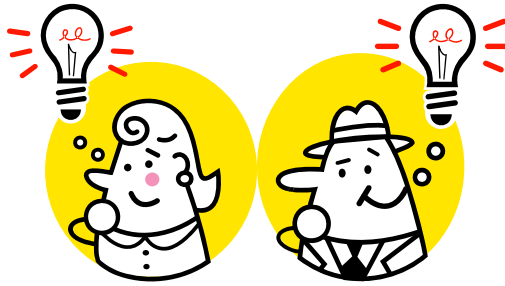
Most residents said that their meals tasted nice. Meat was mostly cooked as people liked, but there were mixed feelings about how the vegetables were cooked, with many residents feeling they were too hard and others feeling they were too soft.

Most residents were happy with how their meals were presented.

DID YOU KNOW?

Milkshakes are a tasty and nutritious snack for older people





Some bright ideas from residents about meals

Residents and staff from one facility have put together a recipe book of their favourite old time recipes. Two favourites are:

Ginger Glazed Meatloaf

750 g minced steak, 1 kg sausage mince, 2 onions, 6 shallots, 2 inch piece of green ginger, 3 tbs tomato sauce, 1 tsp Worcestershire sauce, 1 tbs soy sauce, 1 tsp basil, salt & pepper, 2 eggs



Sauce

2 tbs honey, 2tbs brown sugar, 1 inch piece of green ginger, ½ cup water, salt & pepper, 2 tbs tomato sauce, 2 tsp soy sauce, 2 tsp Worcestershire sauce, 2 tsp cornflour

Method

Combine all ingredients and form into a loaf shape. Bake in a large baking dish in a moderate oven for twenty minutes. Brush meatloaf with sauce and bake for another forty minutes, brushing frequently with sauce.

Serves 8.

And for Dessert...

Nectar Pudding

Bread, lemon juice, butter, apricot jam, 4 bananas, coconut.

Method

Butter a deep pie dish and line with slices of bread and butter without the crusts. Slice the bananas, make a layer and sprinkle with lemon juice and cover generously with apricot jam, then sprinkle with coconut, then another layer of bananas etc. Cover with slices of bread and butter, buttered on both sides. Bake in moderate oven for about 20 mins or until a pale brown.

The Implementing Best Practice Nutrition and Hydration in Residential Aged Care project is funded by the Australian Government Department of Health and Ageing under the Encouraging Best Practice in Residential Aged Care (EBPRAC) Program.

To all at BCS residents and staff

From the University of Newcastle Nutrition Project Team

Wishing each of you a very happy Easter time



Residents, their families and friends, and staff at BCS facilities in NSW have continued to work with us this year to find out how facilities can make mealtimes better. We really appreciate your continued teamwork with this project.

We have already learned that sometimes very small changes can make meal times much more satisfying. Residents at some facilities have made a booklet of their favourite recipes, and a couple of their favourites are on page 4. We are learning many ways to make meal times better for residents.

So thank you from all of us – we are looking forward to working with you for the rest of this year, and helping to make meal times better for all older Australians in residential aged care.



Julie Byles
Director, RCGHA, University of Newcastle



On behalf of Sandra Capra, Lynne Parkinson,
Lin Perry, Helen Bellchambers, Andrew Howie, Annette Moxey,
Nicole Murphy and the Project Team

DID YOU KNOW?

Chocolate Easter eggs are full of energy and good for older people too

SOME GOOD IDEAS FROM FACILITY STAFF

Staff at facilities have come up with clever ideas to make mealtimes better for residents. Some have decided to:

- Ask residents to “taste test” foods from new suppliers
- Review current menu plans
- Cook fresh bread
- Assess new menu plans for nutritional balance

Staff at some facilities suggest:

- Offer at least two choices for the main dish
- Provide more variety for those on texture modified diets
- Listen to Catering Committee and residents suggestions when thinking about menu changes
- Look at the progress of meals from raw food to resident plate and fix up any quality issues
- Seek expert advice (Lottie Stewart Hospital in Sydney) to enhance moulded food meals for residents on puree diets
- Set up a routine to record resident’s nutritional status on admission and to flag when residents are not well nourished



We hope that both residents and staff are enjoying the opportunity this project has given them to think about some simple changes that could be made to make meal times more enjoyable for residents (and staff too).

WHAT RESIDENTS TOLD US

When we asked, most residents across all facilities told us that the food service at their facility was either very good or good.

Most Residents surveyed were happy with their dining room experience, including the quality of utensils and crockery, the meal times and the atmosphere in the dining room, though some residents told us they needed **more dining aids**, and would like **more choice** about when meals were served.

Most residents felt they received enough food and were not hungry after or between meals. But, some residents felt they were not getting enough food at least sometimes, or were not given enough choices about the food they ate. Most residents told us they could not always have **snacks** when they wanted.

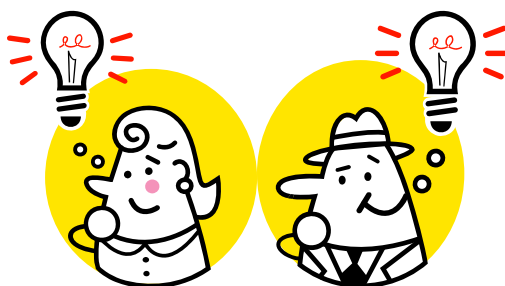
Most residents said that their meals tasted nice. Meat was mostly cooked as people liked, but there were mixed feelings about how the vegetables were cooked, with many residents feeling they were either too hard or too soft.

Quite a few residents in most facilities who were not happy with the size of meals, but most residents were happy with how their meals were presented.

DID YOU KNOW?

Milkshakes are a tasty and nutritious snack for older people





Some bright ideas from residents about meals

Residents and staff from one facility have put together a recipe book of their favourite old time recipes. Two favourites are:

Ginger Glazed Meatloaf

750 g minced steak, 1 kg sausage mince, 2 onions, 6 shallots, 2 inch piece of green ginger, 3 tbs tomato sauce, 1 tsp Worcestershire sauce, 1 tbs soy sauce, 1 tsp basil, salt & pepper, 2 eggs



Sauce

2 tbs honey, 2tbs brown sugar, 1 inch piece of green ginger, ½ cup water, salt & pepper, 2 tbs tomato sauce, 2 tsp soy sauce, 2 tsp Worcestershire sauce, 2 tsp cornflour

Method

Combine all ingredients and form into a loaf shape. Bake in a large baking dish in a moderate oven for twenty minutes. Brush meatloaf with sauce and bake for another forty minutes, brushing frequently with sauce.

Serves 8.

And for Dessert... Nectar Pudding

Bread, lemon juice, butter, apricot jam, 4 bananas, coconut.

Method

Butter a deep pie dish and line with slices of bread and butter without the crusts. Slice the bananas, make a layer and sprinkle with lemon juice and cover generously with apricot jam, then sprinkle with coconut, then another layer of bananas etc. Cover with slices of bread and butter, buttered on both sides. Bake in moderate oven for about 20 mins or until a pale brown.

The Implementing Best Practice Nutrition and Hydration in Residential Aged Care project is funded by the Australian Government Department of Health and Ageing under the Encouraging Best Practice in Residential Aged Care (EBPRAC) Program.

Conference Program

Encouraging Best Practice in Residential Aged Care

Implementing Best Practice Nutrition and Hydration Support in Residential Aged Care
Conference

5 - 6 November 2009
Research Centre for Gender, Health and Ageing
Newcastle, Australia



Implementing Best Practice Nutrition and Hydration Support in Residential Aged Care Conference



The Best Practice Nutrition and Hydration Support in Residential Aged Care Conference will gather people involved in the nutrition and hydration project and will be held at the David Maddison Building, cnr King and Watt Streets, Newcastle, on Thursday 5th and Friday 6th November 2009.

The conference will allow us to share our findings and present a tool kit to the group for feedback. It will also provide an opportunity for you to share your experiences and learn more about the range of projects that took place.

We will discuss:

- Your priorities and objectives for best practice nutrition and hydration, and why these were important
- The strategies and approaches you adopted, how well these worked and what aspects you found most useful
- The factors that helped or hindered you in implementing change and achieving your objectives
- What the changes meant for staff, residents, relatives and others
- The sustainability of the changes made
- What has happened since making these changes

Key Note Speaker

Professor Sandra Capra
Professor of Nutrition, University of Queensland

Professor Capra is currently a principal investigator on the Department of Health and Ageing "Implementing Best Practice Nutrition and Hydration Support in Residential Aged Care" which is part of the national "Encouraging Best Practice in Residential Aged Care" program.

Professor Capra's research interests focus on nutrition and dietetics practice, food and nutrition policy and quality outcomes for food and nutrition services in a variety of settings. Much of her work focuses on the development of tools to use in practice and developing systems for quality improvements and outcomes measurements of service delivery.

CONFERENCE PROGRAM

DAY 1	Thursday 5 November 2009
12.00 - 1.00pm	<i>Arrival, Welcome and Lunch</i> RCGHA, David Maddison Building, Level 2, Foyer
1.00 - 1.15 pm	Introduction Professor Julie Byles, Director, RCGHA
1.15 - 2.00 pm	Implementation and Action Research Dr Lin Perry, Professor of Nursing Research and Practice Development, UTS Sydney Dr Helen Bellchambers, Senior Lecturer, School of Nursing & Midwifery, University of Newcastle
2.00 - 2.45 pm	Presentation of Tool Kit and feedback from facilities. Group discussion and questions. Catherine Chojenta, Research and Communications Officer, RCGHA Dr Helen Bellchambers, Senior Lecturer, School of Nursing & Midwifery, University of Newcastle
2.45 - 3.15 pm	<i>Afternoon Tea</i>
3.15 pm	Presentations from facilities:
3.15 - 3.30 pm	BCS Niola Centre (Parkes): Cheryl Edwards (Executive Care Manager)
3.30 - 3.45 pm	Elizabeth Gates Village (Singleton): Skye Guthrie (Clinical Care Coordinator)
3.45 - 4.00 pm	BCS Kularoo Centre (Forster): Lindy Read (Care Manager) Jenny Holloway (Care Manager) and Neal Sayers (Site Manager for Medirest)
4.00 - 4.30 pm	"Let them eat cake - nutrition, malnutrition and the older adult" Key Note Speaker: Professor Sandra Capra, Professor of Nutrition, University of Queensland
4.30 - 4.45 pm	Group discussion and questions Closing comments by Professor Julie Byles, Director, RCGHA
7.00 pm	<i>Dinner</i>
DAY 2	Friday 6 November 2009
9.00 - 9.15 am	Introduction A/Prof Lynne Parkinson, Senior Research Fellow, RCGHA
9.15 am	Presentations from facilities:
9.15 - 9.30 am	Lindsay Gardens (Hamilton): Claire Abbott (Clinical Care Coordinator and Champion)
9.30 - 9.45 am	BCS Orana Centre (Point Clare): Cathy Peters (Champion) and Bronwyn Biles (Champion)
9.45 - 10.00 am	BCS Aminya Centre (Baulkham Hills): Vickie Sprouster (Catering Manager)
10.00 - 10.15 am	Group discussion and questions
10.15 - 10.45 am	<i>Morning Tea</i>
10.45 am	Presentations from facilities:
10.45 - 11.00 am	Nareen Gardens (Bateau Bay): Tracey Richards (Clinical Care Coordinator and Champion)
11.00 - 11.15 am	BCS Warena Centre (Bangor): Suzanne Little (Champion)
11.15 - 11.30 am	St Andrews Village (Tamworth): Lorraine Geddes (Lifestyle Coordinator) and Marjorie Warren (Champion)
11.30 - 12.15 pm	Evaluation update A/Prof Lynne Parkinson, Senior Research Fellow, RCGHA
12.15 - 12.30 pm	Group discussion and questions
12.30 - 1.30 pm	<i>Lunch</i>
1.30 - 1.45 pm	Puree Meals Helen Dimmick, Food Service Manager, Lottie Stewart Hospital
1.45 - 2.15 pm	A Dietitian's Perspective Andrew Howie, Nutrition Advisor, RCGHA
2.15 - 2.45 pm	Comments from BCS and UCA Closing comments by A/Prof Lynne Parkinson, Senior Research Fellow, RCGHA
2.45- 3.15 pm	<i>Afternoon Tea and End of Conference</i>

Conference venue

Research Centre for Gender, Health and Ageing (RCGHA)

David Maddison Building
Level 2 - Case Study Theatre
Corner King and Watt Street
Newcastle NSW

Phone: 02 49138325

Welcome and lunch will take place in the Foyer.

Accommodation

Noah's On the Beach
Cnr Shortland Esplanade & Zaara St
Newcastle NSW 2300

Tel: +61 2 4929 5181

<http://www.noahsonthebeach.com.au>

Check in time: 2 pm

Luggage can be stored at any time of the day and complimentary parking is available for guests, including before check in time if needed. Please register with the hotel after parking.

Getting there

Road

Newcastle is 2 hours drive north of Sydney and is accessible from the following major Highways: F3, Pacific Highway, New England Highway and the Golden Highway. There is 2 hour street parking on Watt and King streets and a parking station in Bolton street.

Rail

Newcastle terminus train station is located 5 minutes away from the RCGHA by foot on the corner of Scott and Watt streets.

Coach

Newcastle bus station is located 5 minutes away from the RCGHA by foot, behind the train terminus station.

Air

Newcastle Airport is located 30 minutes from Newcastle city centre and the RCGHA.



CONTACT US

Level 2

David Maddison Building
Corner King and Watt Street
Newcastle NSW

Email: Elodie.Sprenger@newcastle.edu.au

Phone: +61 2 4913 8325

Fax: +61 2 4913 8323