

Dietary management  
of IBS in older adults  
– does FODMAP diet  
help manage IBS in  
an older population?

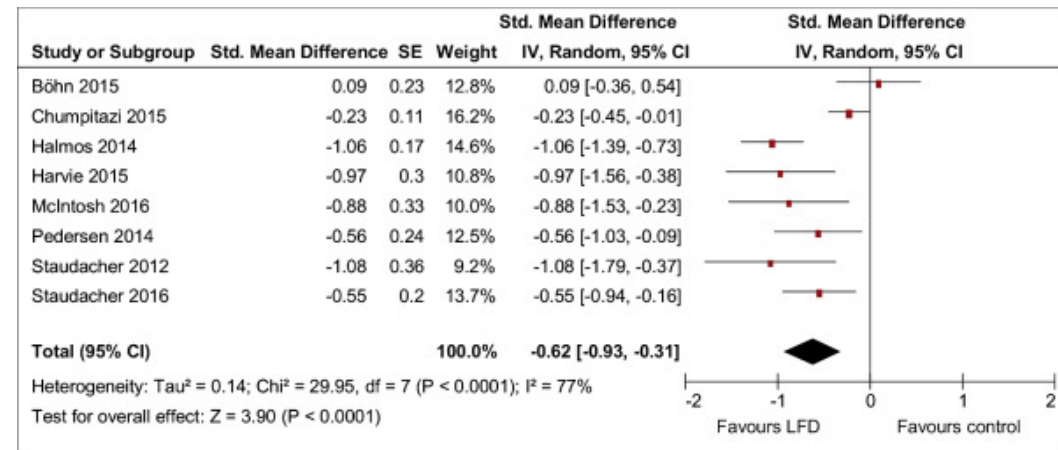


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# Introduction

- The low FODMAP diet - effective treatment for adults with IBS (D/M)
  - Prospective, randomised trial, meta-analysis evidence from multiple centres
  - Efficacy range 50% - 86%
  - Mean participant age 34.4-50.9 years
  - No published low FODMAP intervention studies for those >65 years



Results of the meta-analysis for gastrointestinal symptoms in the low-FODMAP group versus control group – *Schumann et al*

# Introduction

- **Chronic diarrhoea affects 10- 20% of older adults**
  - High rate of significant organic pathology
  - Diagnosis of IBS is made less often in older adults <sup>1</sup>
  - Fewer effective treatments are trialled <sup>2</sup>
  - Dietary interventions may risk macro / micronutrient malnutrition

<sup>1</sup> Pilotto et al, 2008; <sup>2</sup> Schiller et al 2009

# Aims



- To investigate if older adults following the low FODMAP diet for six weeks experience:
  - improvements in GI symptoms
  - changes in psychological factors
  - any negative nutrient changes
- To investigate the acceptability of dietary advice provided and experiences while following the diet



# Methods



Prospective  
observational  
intervention



Uncontrolled



Pilot study



Convenience sample

# Methods



Older adults with diarrhoea referred to Christchurch Public Hospital were recruited

- Inclusion criteria

- >65 years
- Diarrhoea main reason for referral
- Living in their own home
- No cause of diarrhoea found on colonoscopy or from biopsies

- Exclusion criteria

- Treated type 1 or 2 diabetes
- Known bowel disease
- Any other medical condition deemed to be unsuitable

# Methods - data collection

- Demographics
- Medical conditions
- Drug history



# Methods - data collection

- Demographics
- Medical conditions
- Drug history
- **Gastrointestinal symptoms – SAGIS**
- Anxiety and depression scale - HADS
- 4-day food diary – Foodworks/ FODMAP calculator

Initial  
appointment



# Methods - data collection

- Demographics
- Medical conditions
- Drug history
- **Gastrointestinal symptoms – SAGIS**
- Anxiety and depression scale - HADS
- 4-day food diary – Foodworks/ FODMAP calculator
- Qualitative data on perception of following the diet

Follow up  
appointment

# Methods – dietary intervention

- Initial appointment (Experienced Registered Dietitian)
  - 60-90 minutes
  - Taught how to follow the diet
  - Supporting information provided
- Follow up appointment – after 6 weeks
  - 30 mins
  - Review of progress
  - Discharged to GP if no improvement
  - Reintroduction process explained if improvement experienced

# Methods – resources provided



- Food lists
- Recipes
- Menu plan
- Information sheet – with tailored advice
- Large font
- Single sided

Low FODMAP diet  
Sample Menu Plan

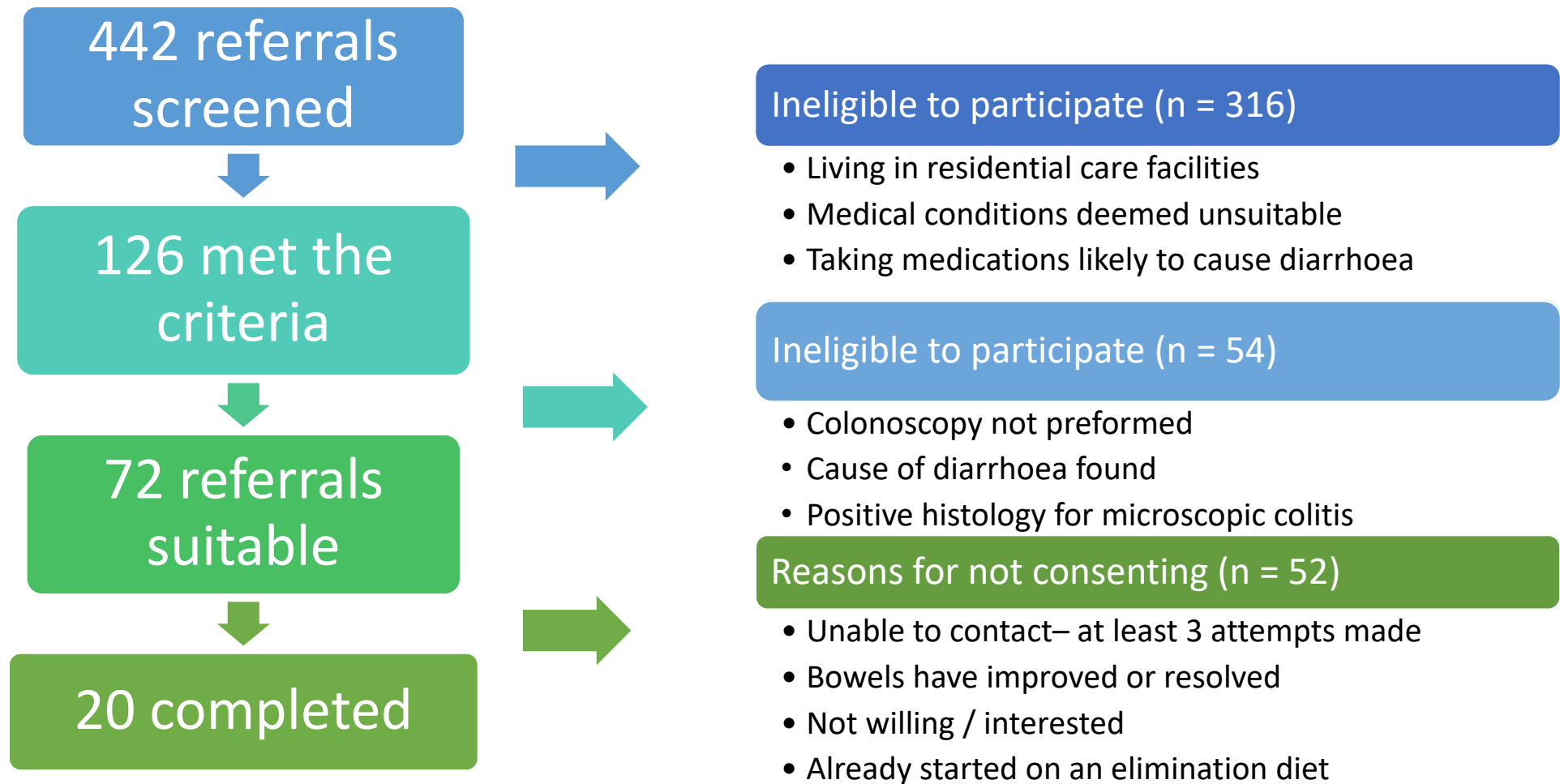


Plan your meals so that you:

- have some type of protein at each mealtime. Protein foods include eggs, meat, chicken, fish, legumes, tofu, milk and dairy products
- have some carbohydrates at each mealtime. Carbohydrates include rice, potatoes, gluten free pasta, gluten free bread, spelt sourdough bread, oats, quinoa, corn thins or cruskits, rice cakes
- are still getting at least 2 serves of fruit a day and 5 serves of vegetables a day

<b>Breakfast</b>	Porridge with lactose free or soymilk and fruit
	Cornflakes, rice bubbles, suitable cereals with lactose free or soymilk and fruit
	Gluten free Weetbix with lactose free or soymilk and fruit
	Gluten free toast or spelt sourdough with margarine, strawberry or raspberry jam, marmalade, vegemite or marmite and pottle of yoghurt or glass of lactose free or soymilk and fruit
	Poached, boiled or scrambled eggs of gluten free toast or spelt sourdough and piece of fruit
<b>Lunch</b>	Choose one of the options below as well as a lactose free yoghurt, lactose free or soymilk drink and piece of fruit.

# Results - disposition of participants

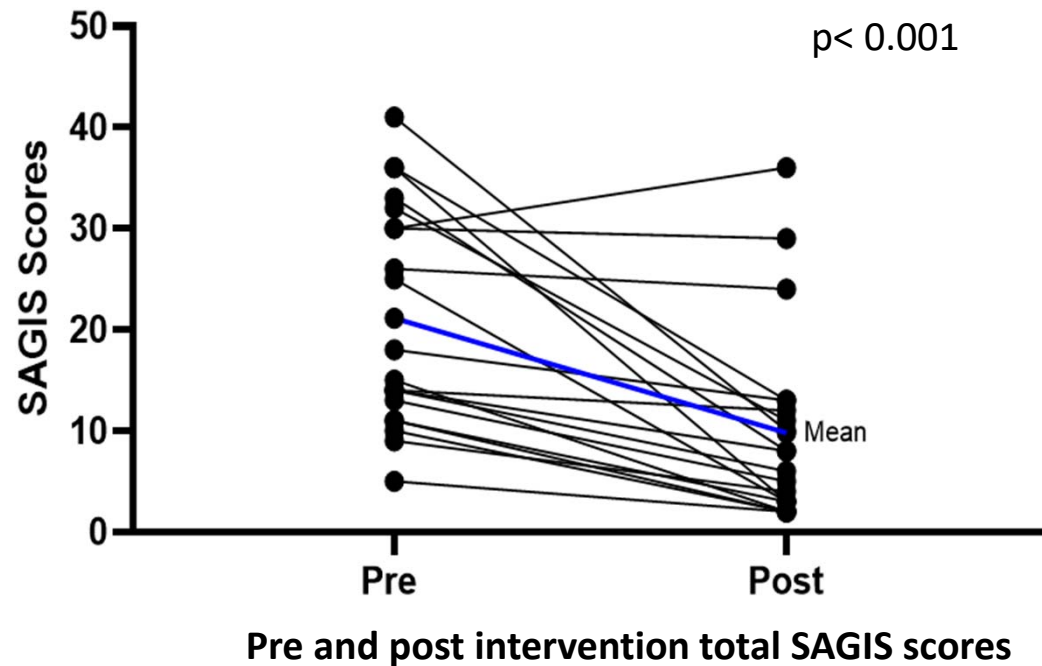


# Results – baseline characteristics



<b>Characteristics</b>	<b>Variable</b>	<b>Participants n=20</b>
<b>Mean age</b>	<b>Years</b>	<b>76 (67-84)</b>
<b>Gender</b>	<b>Male</b>	<b>5 (25%)</b>
	<b>Female</b>	<b>15 (75%)</b>
<b>Ethnicity</b>	<b>NZ European</b>	<b>16 (80%)</b>
	<b>European</b>	<b>2 (10%)</b>
	<b>Other</b>	<b>2 (10%)</b>
<b>Deprivation index</b>	<b>&lt;5</b>	<b>5 (25%)</b>
	<b>&gt;5</b>	<b>15 (75%)</b>
<b>Number of medications</b>	<b>&lt;5</b>	<b>10 (50%)</b>
	<b>&gt;5</b>	<b>10 (50%)</b>

# Results – total SAGIS scores

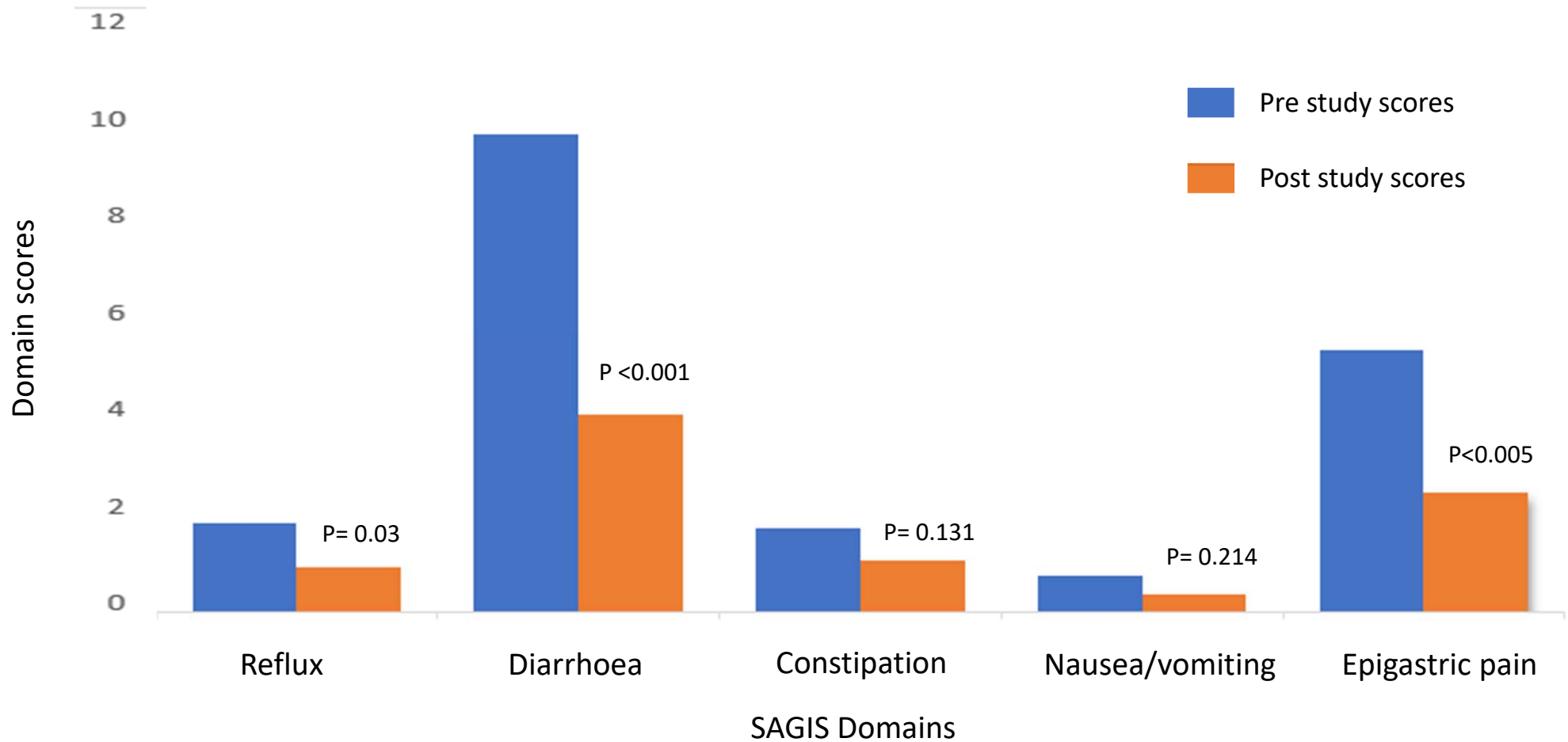


## SAGIS domains

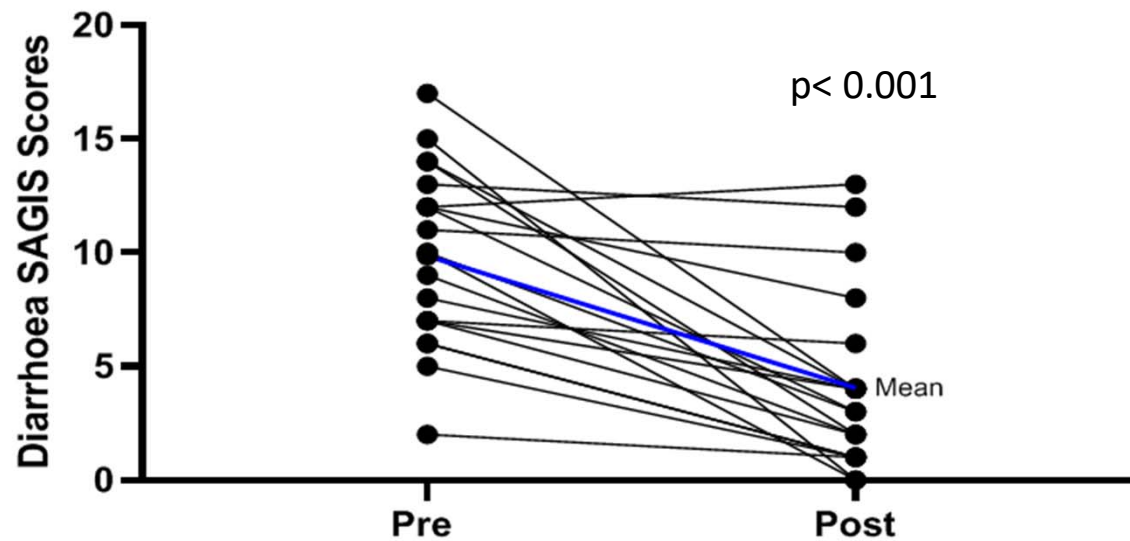
- Acid/Regurgitation/Gas
- Diarrhoea /Incontinence
- Constipation / Difficult defecation
- Nausea/Vomiting
- Epigastric pain/Discomfort

Mean difference from the pre intervention to follow up scores of 11.35 with a standard deviation of 10.75

# Results – changes in SAGIS domain scores



# Results – diarrhoea domain scores



Pre and post intervention diarrhoea scores

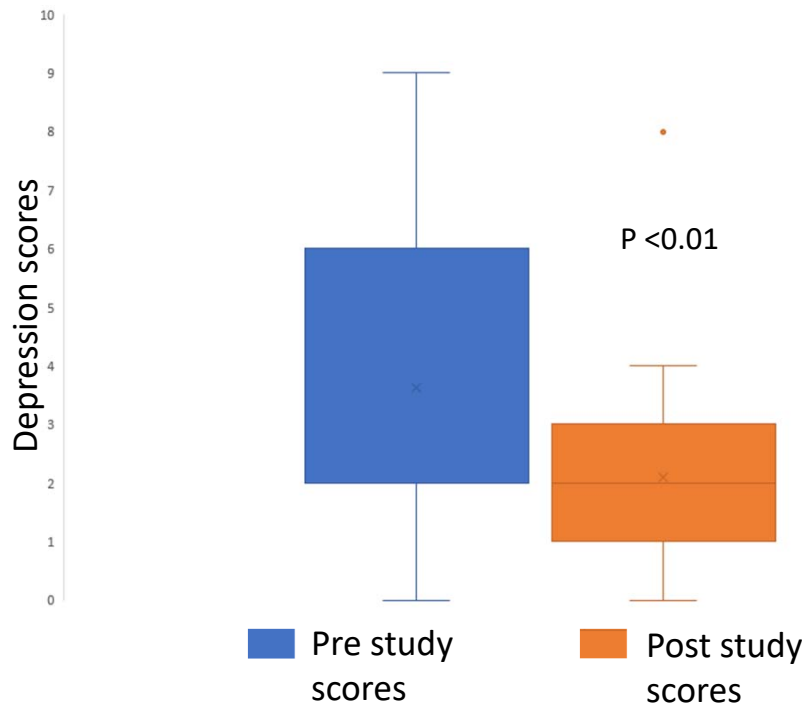
## Domain questions

- Pain or discomfort prior to a bowel motion
- Loose stools
- Incontinence
- Diarrhoea
- Excessive gas and passing of wind

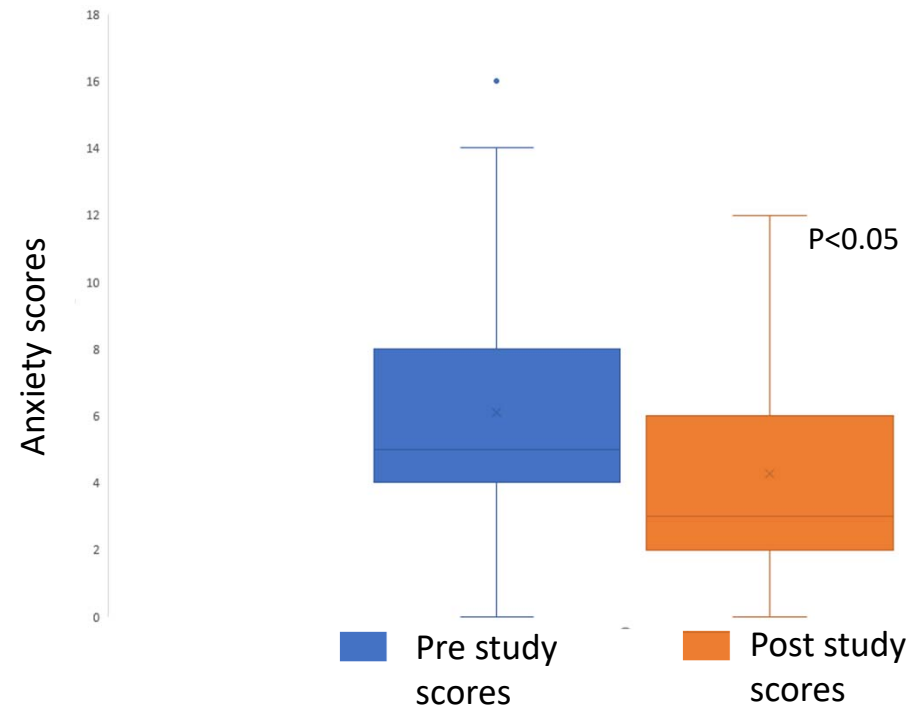
Mean difference from the pre intervention to follow up scores of 5.8 with a standard deviation of 4.48



# Results – depression and anxiety

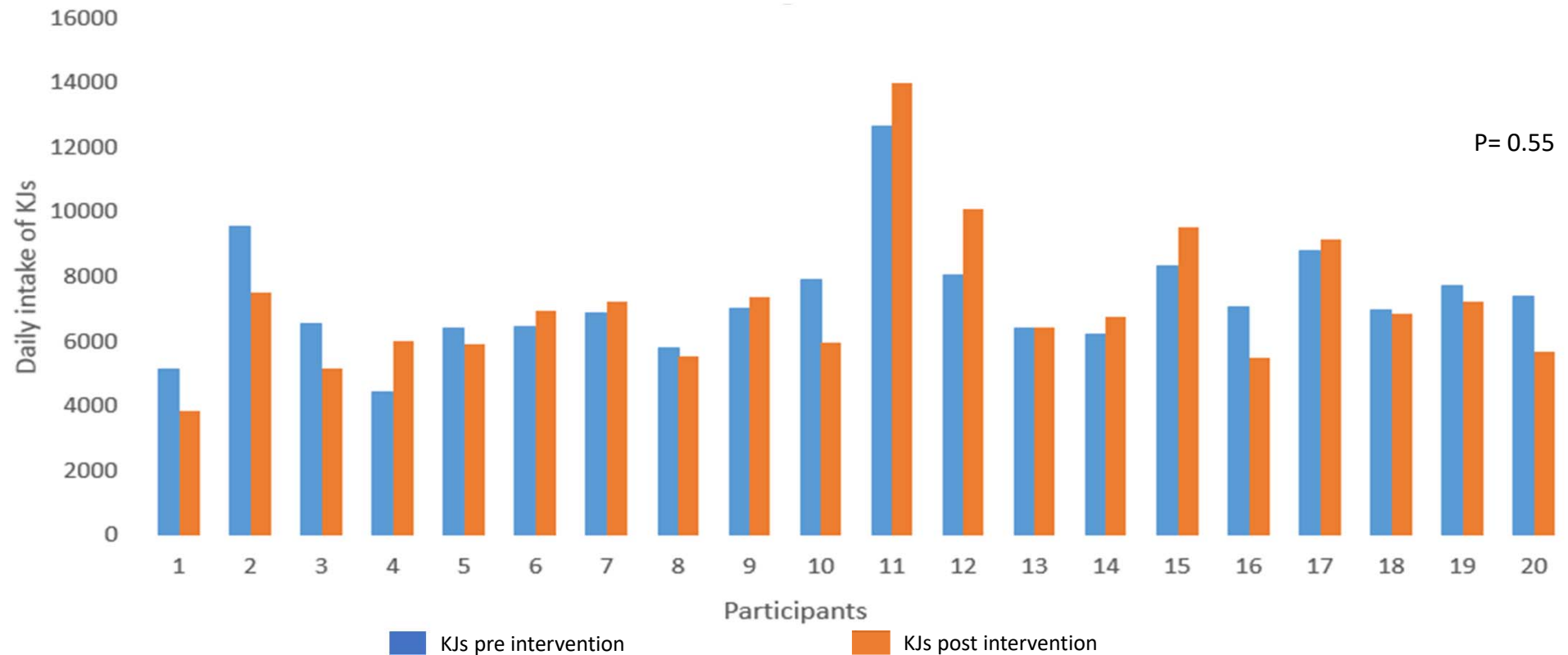


Blue X=Mean pre depression score = 3.63  
Orange X=Mean post depression score = 2.11

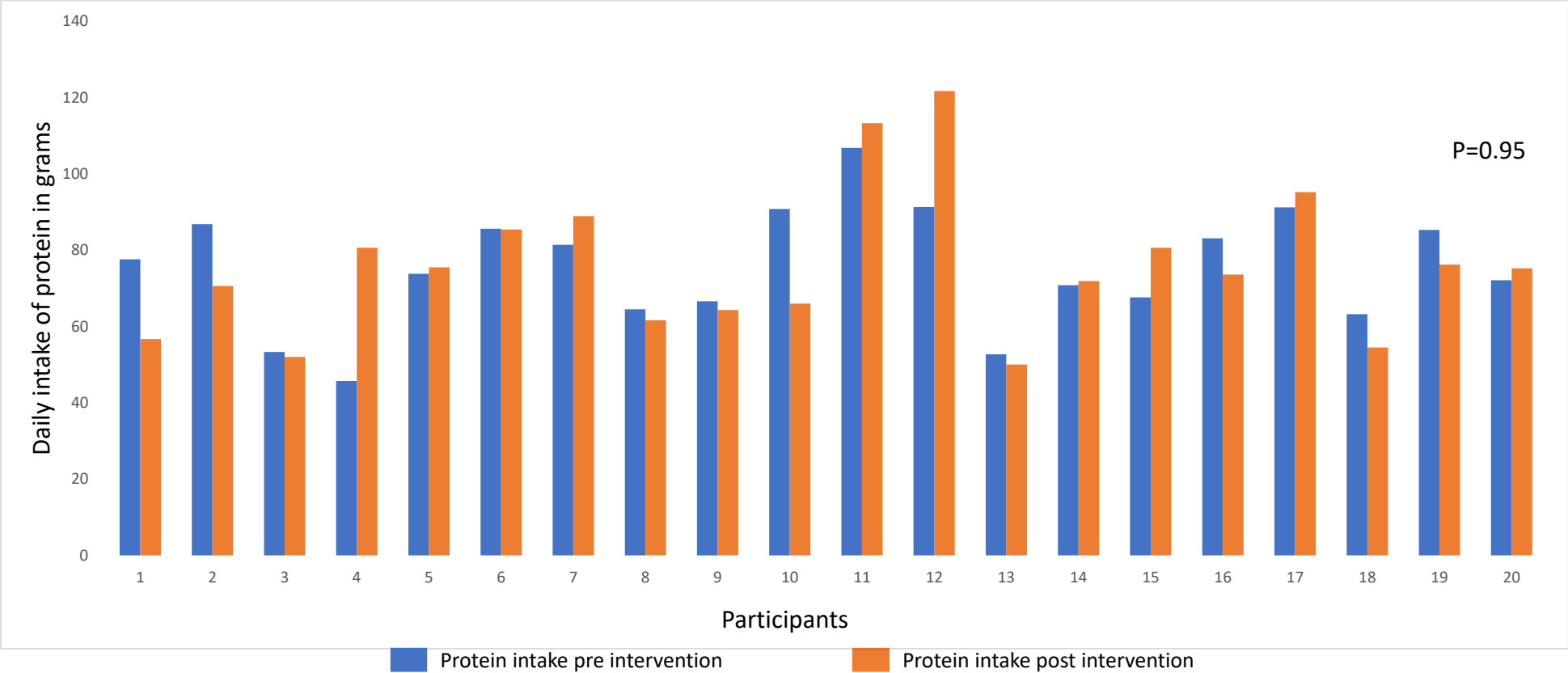


Blue X=Mean pre anxiety score = 6.11  
Orange X=Mean post anxiety score = 4.26

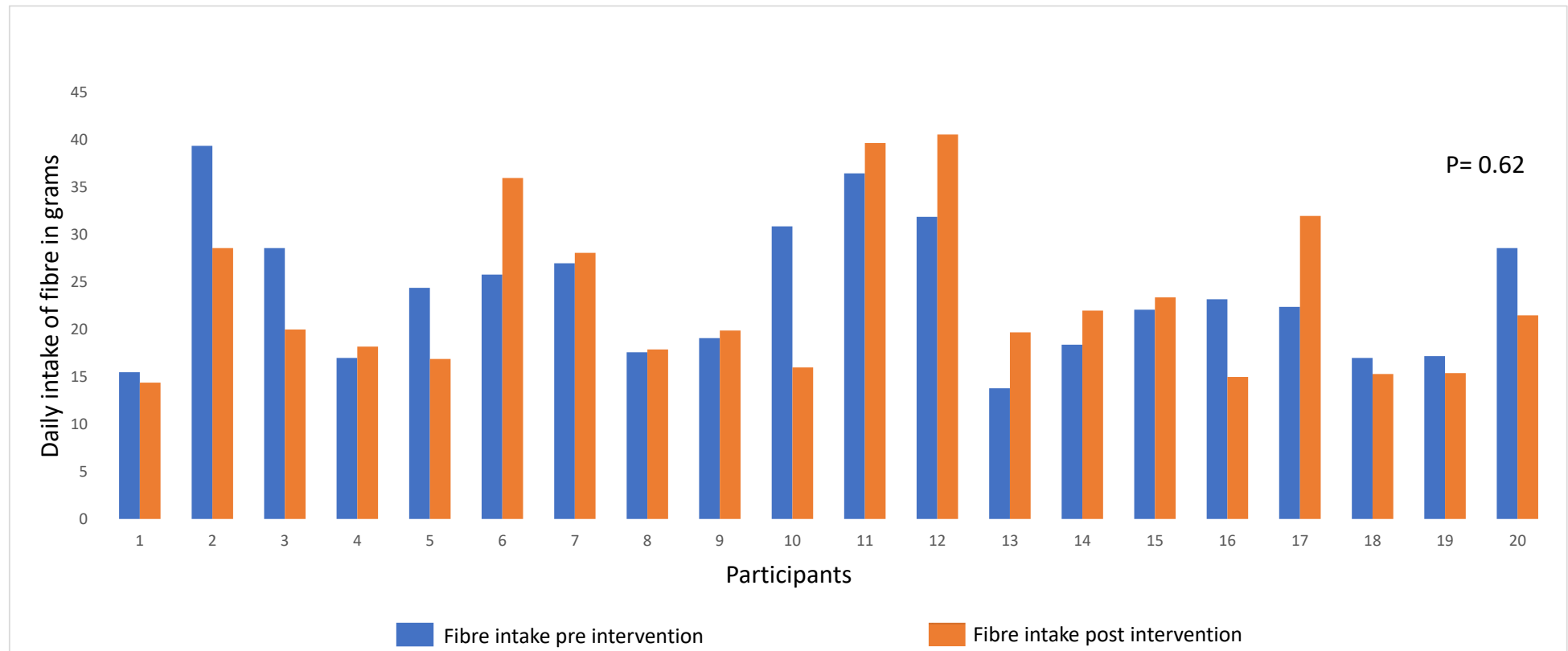
# Results – total energy differences



# Results – protein differences



# Results – fibre differences



# Results – qualitative



- 19 participants found that the diet taught in a way that was easily understand
- Only 9/16 participants thought they would be able to follow the diet if only written information was given with no oral explanation

***“I think it would have been quite daunting without an oral explanation”***

***“Yes I could have followed it but was better to have contact with a dietitian”***

***“I was glad to have the oral explanation because my concentration span lessens with my age”***

# Results – qualitative

When asked what was the most difficult part of the diet to follow participants stated:

- Missing high FODMAP foods
- Getting used to the diet/getting started
- Eating the gluten free bread – expensive and/or taste
- Entertaining or eating out
- Reading food labels



# Conclusion



The low FODMAP diet is effective for older adults with functional diarrhoea



If well taught, the diet does not compromise nutritional status



In this small group – there were improvements in anxiety and depression levels



Older adults prefer verbal instruction over written guidelines

❖ Thank you to

The research team

Dr Cath Wall – University of Otago

Carole Atkinson – University of Otago

Paula Aitkin – NZRD

Study participants



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