



Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin

Bridging Research & Practice

Overweight, obesity & chronic health conditions in women with an intellectual disability at menopause in Ireland



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The Intellectual Disability Supplement to the Irish longitudinal Study on Ageing (IDS TILDA)

Background and context

- Overweight and obesity is a chronic disease, occurring where excess body fat poses health risk
- Nearly a quarter of the world's population are either overweight or obese
- It is the fifth principal cause of death globally
- Central Adiposity increases the risk of developing metabolic disease
- Ireland ranked in the top 4 countries for obesity
- More prevalent in women with an ID



Ireland set to be most obese country in Europe, WHO says

Irish men at forefront of trend, leading an 'overweight' table of 53 countries

Wed, May 6, 2015, 08:43 | Updated: Wed, May 6, 2015, 18:03

Rachel Flaherty



In terms of obesity alone, the estimates show a big jump for women in the Irish Republic, soaring from 23 per cent to 57 per cent. Photograph: Gareth Fuller/PA

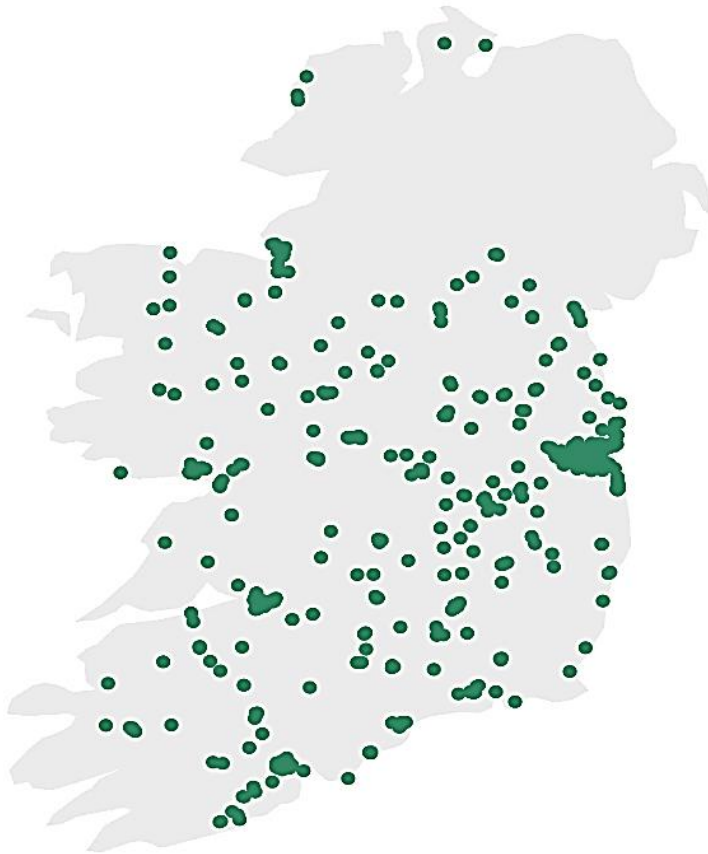
Ireland is on course to become the most obese country in Europe, according to the latest figures from World Health Organisation (WHO) experts.



The IDS-TILDA Story [2007 – 2023]



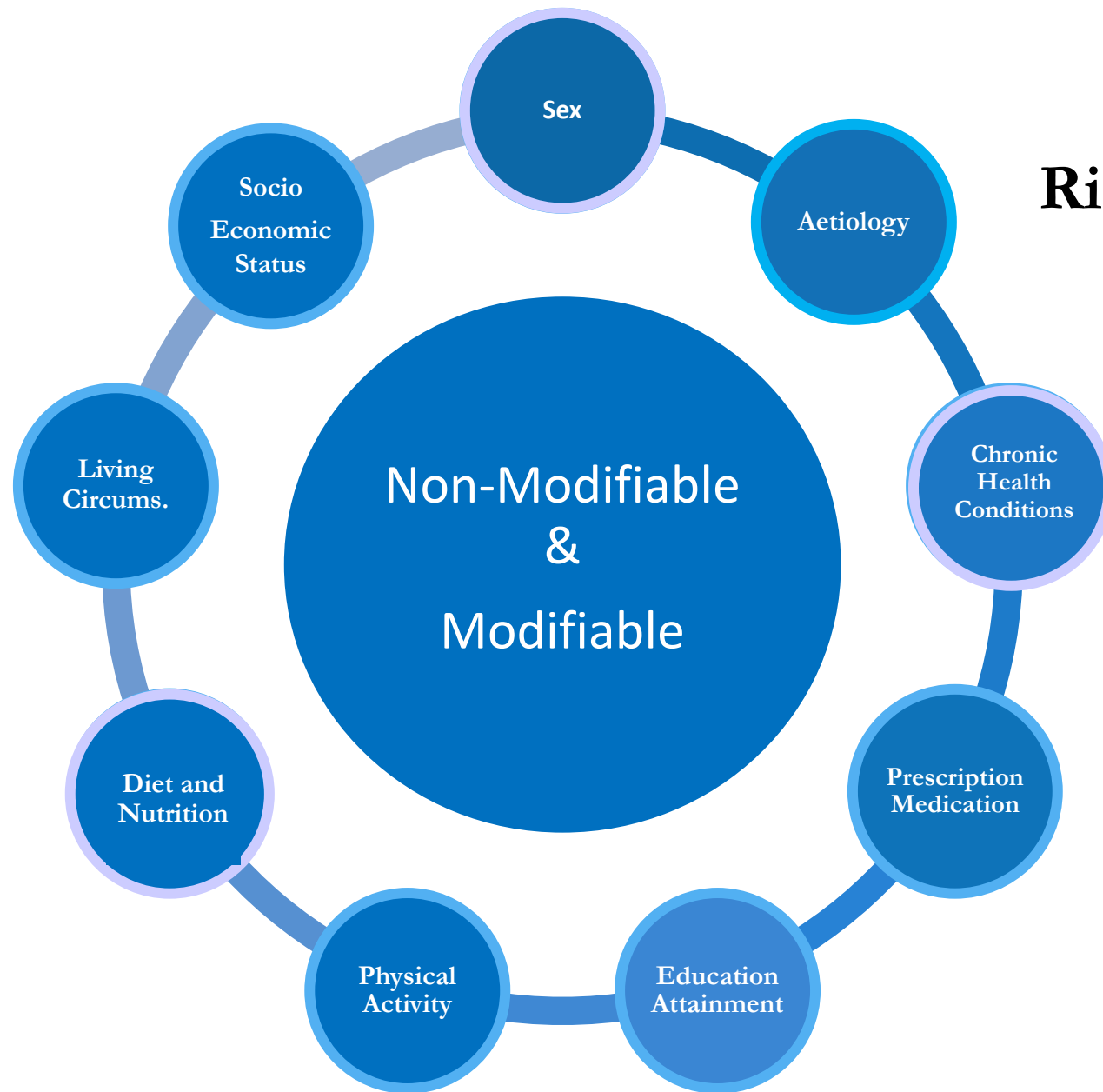
The Intellectual Disability Supplement to
The Irish Longitudinal Study on Ageing
(IDS-TILDA)



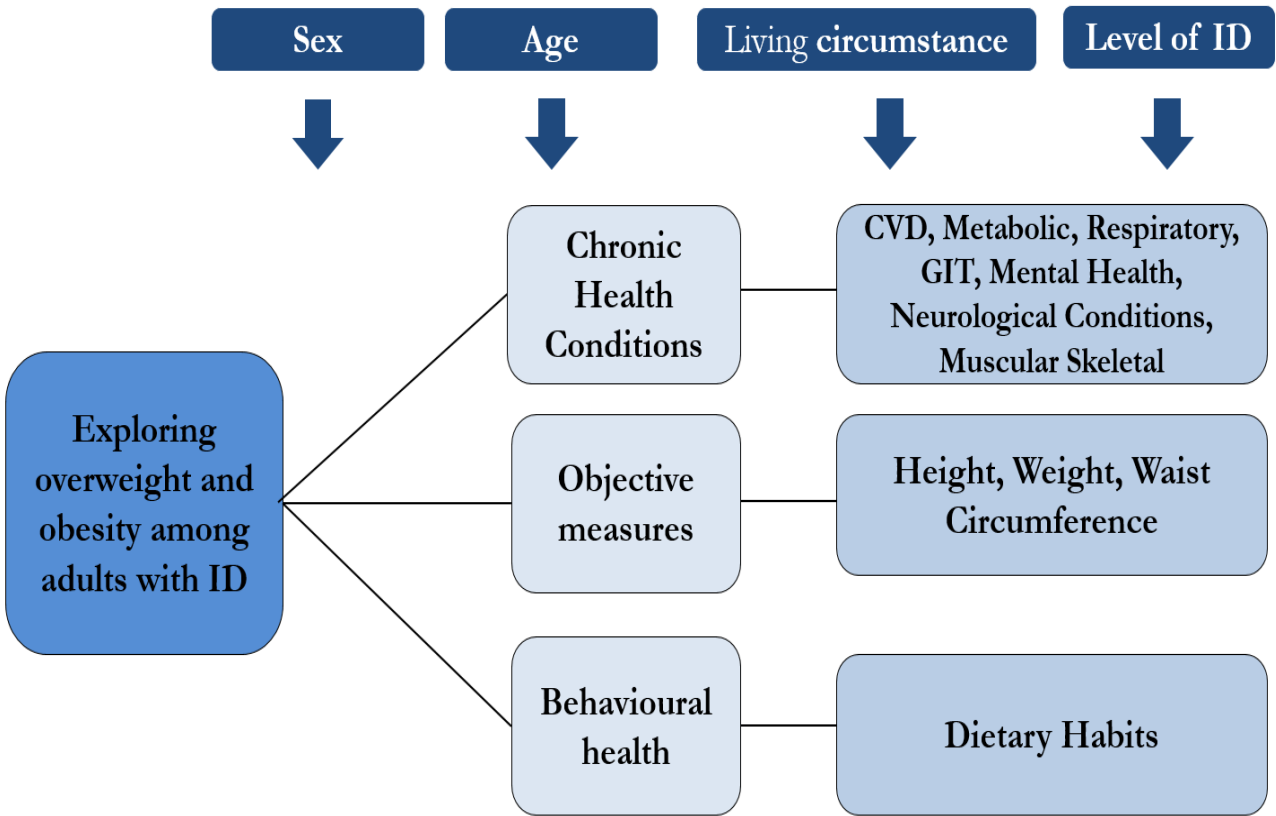
Longitudinal study collecting data every 3 years which we
refer to as a wave

First nationally-representative longitudinal study on ageing with an intellectual disability
comparable to the general population



Risk Factors for Overweight/Obesity







Framework guiding this study



Objective Measures

Objective Measures			
	BMI (weight in kilograms/height in meters squared (kg/m^2))	Under weight <18.50 Normal weight 18.50-24.99 Overweight 25.00-29.99 Obese >30	
	Waist circumference	Cut off points Risk of metabolic complications	
			>94 cm (M) >80 cm (W)
			>102 cm (M) >88 cm (W)
Waist-hip ratio		≥ 0.90 cm (M) ≥ 0.85 cm (W)	Substantially increased

Food Frequency Questionnaire

Consumption Patterns Portions Per Day/Week/Month								
Never /Less than once per month	1-3 per month	Once a week	2-4 per week	5-6 per week	Once per day	2-3 per day	4-5 per day	6+ per day
Sample size portions								
								
200 ml Disposable cup	Matchbox size piece of cheese	5 ml teaspoon	2 Slices of bread					



IDS-TILDA Wave 2 Women (N=393)

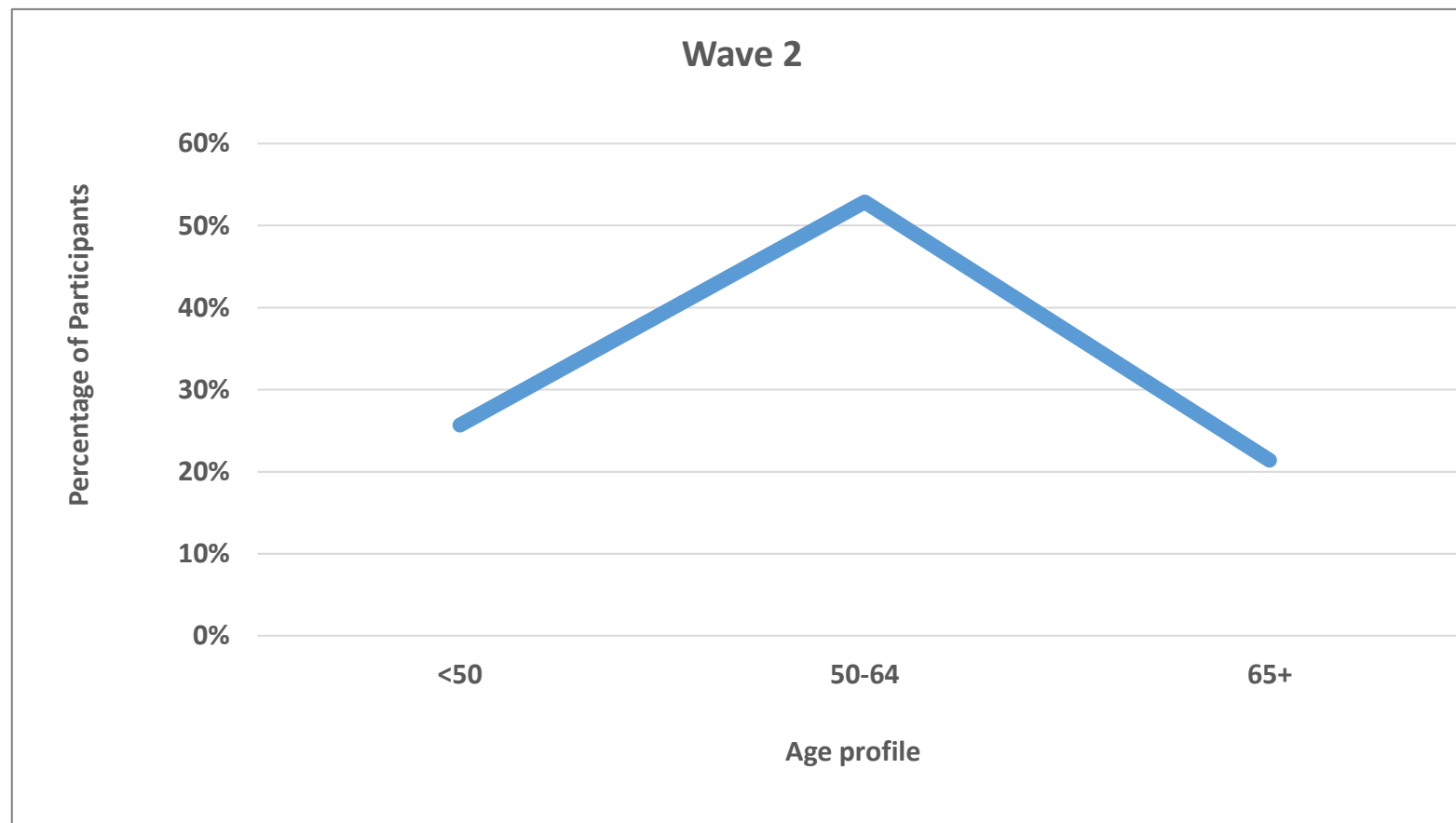
Wave 1 753
Participants

Wave 2 708
Participants

Wave 3 609
Participants

Wave 4 739
Participants
(233 new)

Wave 5 762
Participants
(141 new)



Women, Menopause and overweight and obesity (n=350)

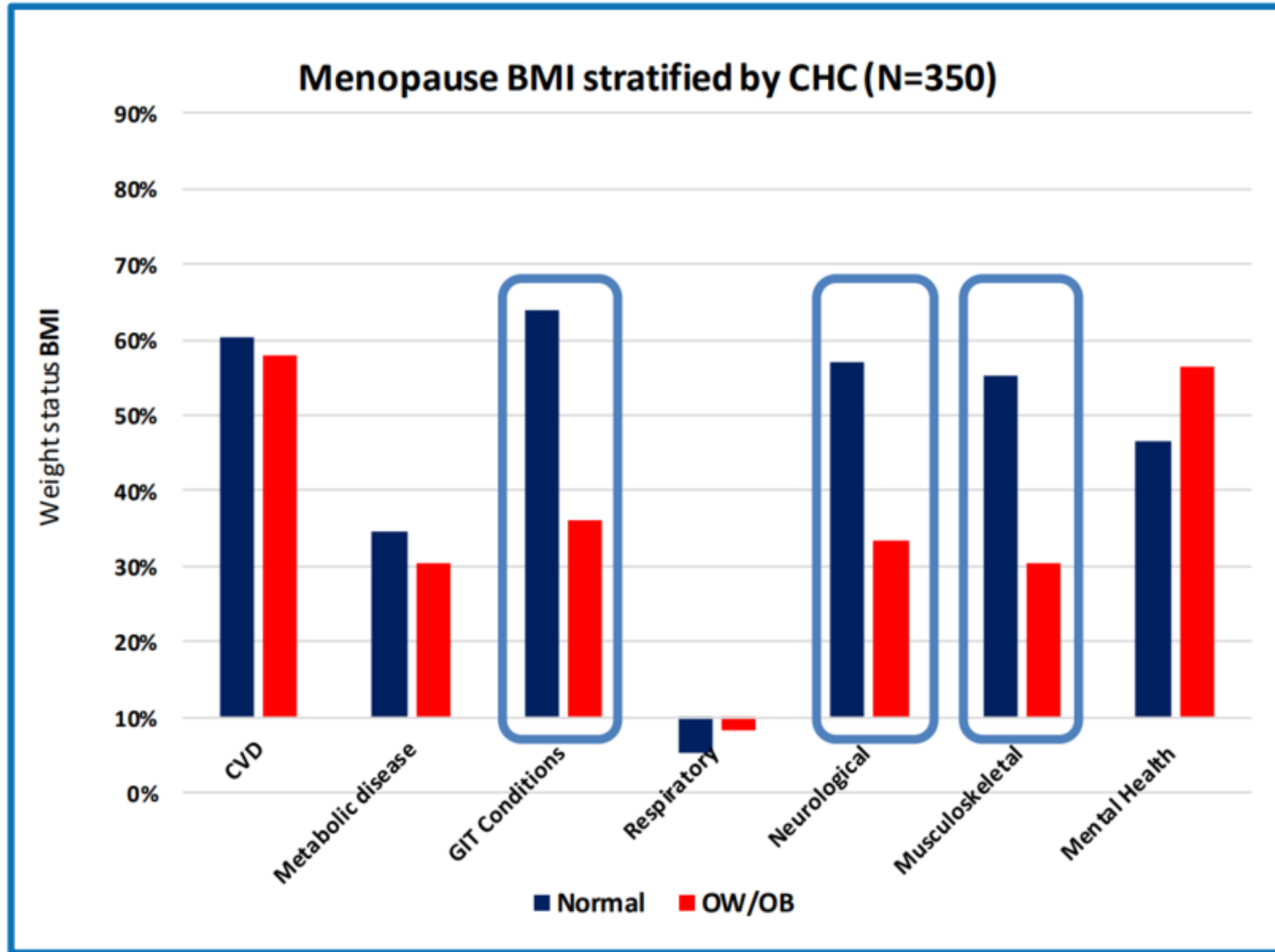
75% of women who had **gone through the menopause** were overweight or obese

76% of women at menopause had a waist circumference which exposed them to the **risk of metabolic disease**

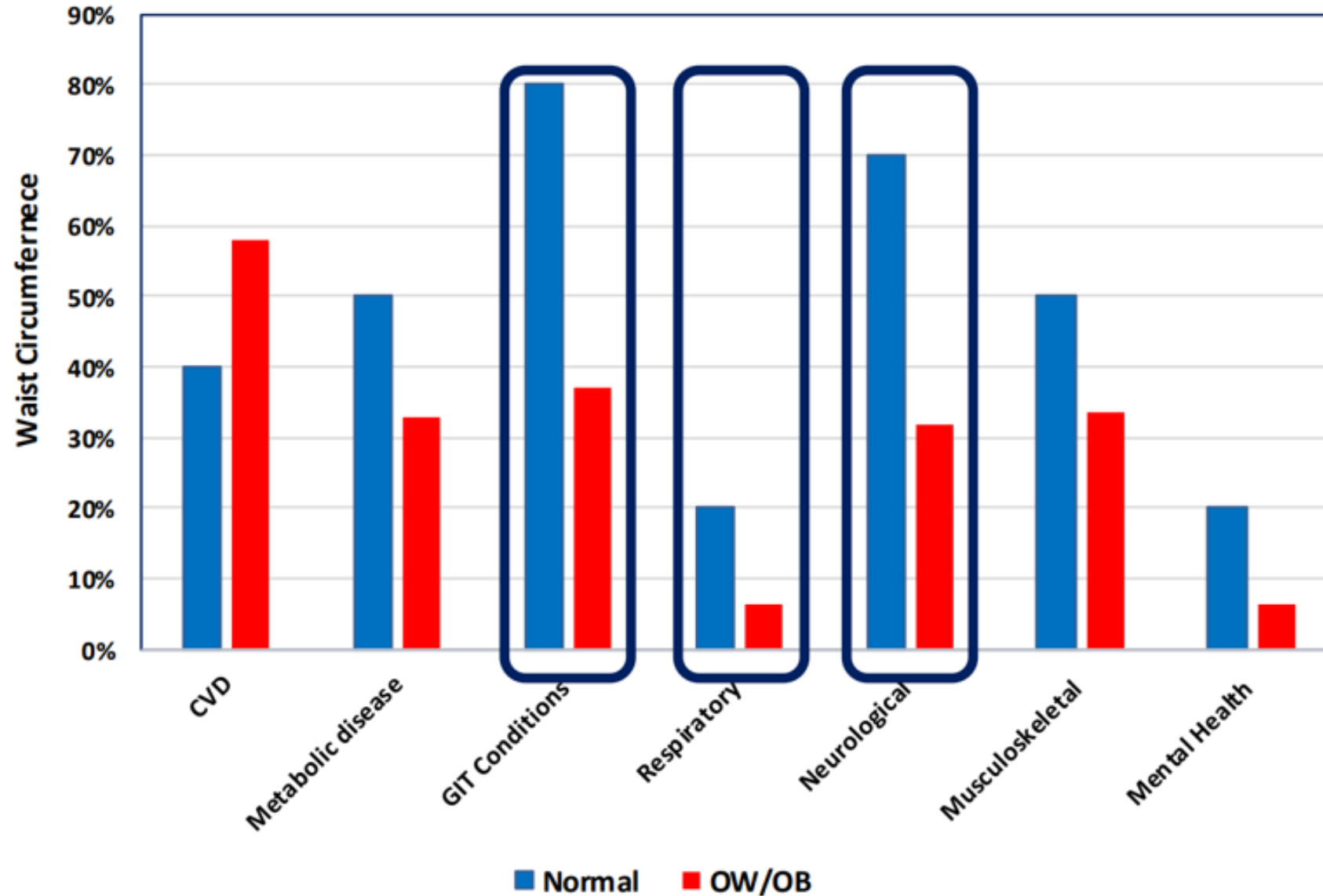
Of all the women at menopause 54% had a **moderate ID**

Of all the women living in a **community group home** 47% were overweight or obese





Menopause, waist circumference stratified by CHC (N=350)



Logistical Regression

Modelling - Women - Chronic Health Conditions on BMI and waist circumference







Logistical Regression of the Risk Factors for CHC in Women who were Overweight/obese or with a Waist Circumference in the at Risk of <u>MetS</u> Category							
		CHC in women at menopause who are overweight/obese or with a waist circumference in the at risk of <u>MetS</u> reference category with the condition or not					
		BMI			Waist Circumference		
		p-value	Adjusted Odds Ratio (OR)	95% confidence interval (CI)	p-value	Adjusted Odds Ratio (OR)	95% confidence interval (CI)
GIT (no GIT)		0.008	1.248	1.060 – 1.470	0.046	1.516	1.007 – 2.284
Neurological (no neuro)		0.016	1.218	1.037 – 1.431	0.060	1.405	0.986 – 2.004
Muscular Skeletal (no MSK)		0.012	1.232	1.048 – 1.449	0.746	1.058	0.753 – 1.485

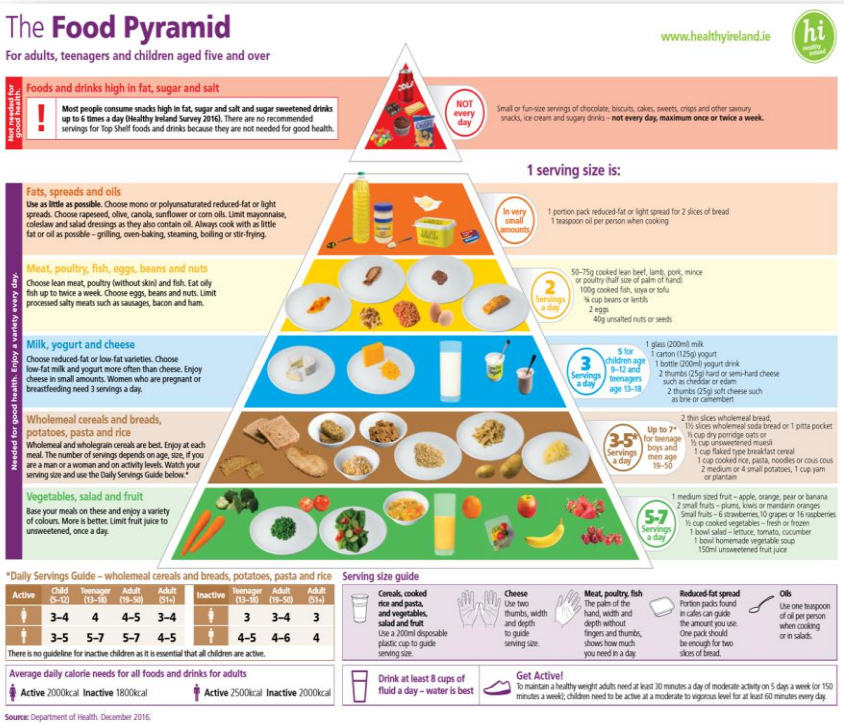
Food Frequency Questionnaire (n=584/609) - Portions Per Day

Questions on Dietary Patterns Answers Choices (food and drinks)

FFQ 13 Food Groups:

1. Meat and meat alternatives
2. Fish and poultry
3. Bread and savoury biscuits
4. Cereals
5. Potatoes, rice and pasta
6. Dairy products and fats
7. Bread or vegetables
8. Fruit
9. Vegetables fresh, frozen or tinned
10. Sweets and snacks
11. Soups, sauces and spreads
12. Drinks
13. Other food items

Consumption Patterns Portions Per Day/Week/Month									
Never /Less than once per month	1-3 per month	Once a week	2-4 per week	5-6 per week	Once per day	2-3 per day	4-5 per day	6+ per day	
Sample size portions									
   									
200 ml Disposable cup Matchbox size piece of cheese 5 ml teaspoon 2 Slices of bread									



Portions Per Day Food Frequency Questionnaire (portions per day)

Portions Per Day/week/Month on the Food Frequency Questionnaire								
Never/less than once a month	1-3 per month	Once a week	2-4 per week	5-6 per week	Once a day	2-3 per day	4-5 per day	6+per day

Recommendations on the Food Pyramid (servings per day)

Shelf of Food Pyramid		Portions Per Day
Shelf 1	Vegetables, salad and fruit	5-7 servings per day
Shelf 2	Wholemeal cereals and breads, potatoes, pasta and rice	3-7 servings per day (up to 7 for teenage boys and men aged 19-50)
Shelf 3	Milk, yogurt and cheese	3 servings per day
Shelf 4	Meat, poultry, fish, eggs, beans and nuts	2 servings per day
Shelf 5	Fats, spreads and oils	In very small amounts
Shelf 6	Foods and drinks high in fat, sugar and salt	Not every day maximum once or twice a week

Mapped to the Food Pyramid Recommended Daily Amount (RDA)
>than the RDA
= to the RDA
< than the RDA

Compliance with nationally recommended mean number of food portions per food group per day (N=584)

Food Pyramid shelf	RDA	n	%	Mean no. of portions per day	SD	Total
Shelf 1-				2.28	± 0.769	584
	>RDA per day	195	33.4			
	RDA per day	114	19.5			
	<RDA per day	275	47.1			
Shelf 2-				2.49	± 0.847	583
	>RDA per day	28	4.8			
	RDA per day	136	23.3			
	<RDA per day	419	71.9			
Shelf 3-				2.36	± 0.762	583
	>RDA per day	172	29.5			
	RDA per day	102	17.5			
	<RDA per day	309	53			
Shelf 4 -				2.11	± 0.688	583
	>RDA per day	301	51.6			
	RDA per day	110	18.9			
	<RDA per day	172	29.5			
Shelf 5 -				2.09	± 0.558	579
	>RDA per day	394	68			
	RDA per day	66	11.4			
	<RDA per day	119	20.6			
Shelf 6 -				2.02	± 0.194	580
	>RDA per day	558	96.2			
	RDA per day	6	1			
	<RDA per day	16	2.8			

5-7 servings per day

Vegetables, salad & fruit

3-7 servings per day

Wholemeal cereals & breads, potatoes, pasta & rice

3 servings per day

Milk, yogurt & cheese

2 servings per day

Meat, poultry, fish, eggs, beans & nuts

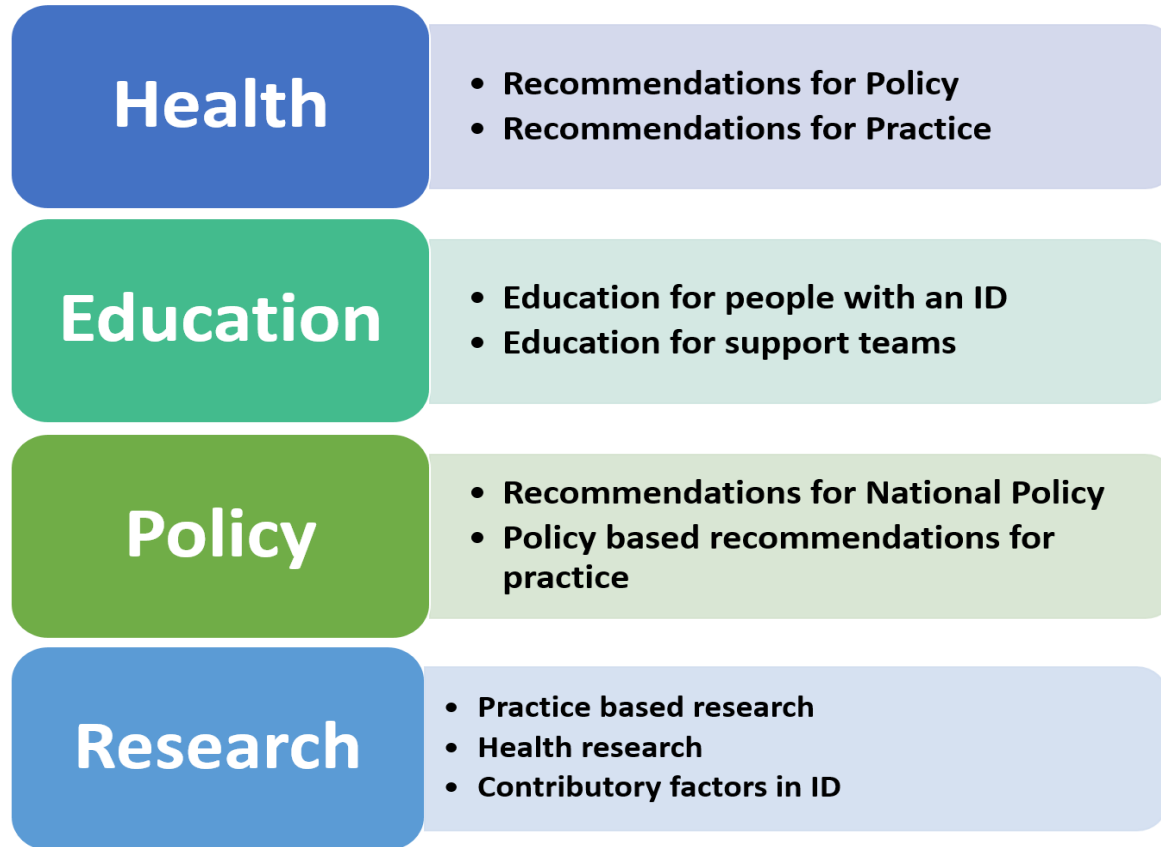
In very small amounts

Fats, spreads & oils

Not every day maximum once or twice a week

Foods & drinks high in fat, sugar & salt

Recommendations



To conclude

- Overweight and obesity is prevalent in older women with an intellectual disability
- Overweight and obesity compromises women's health
- Women with an intellectual disability are at risk and experience central adiposity
- Menopause is a time of risk for women with an intellectual disability
- Modifiable factors need to be considered
- Research and resources support practice improvements



Illuminating the disease burden for older people with an ID who are obese will inform behaviour and lifestyle change



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Thank You

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