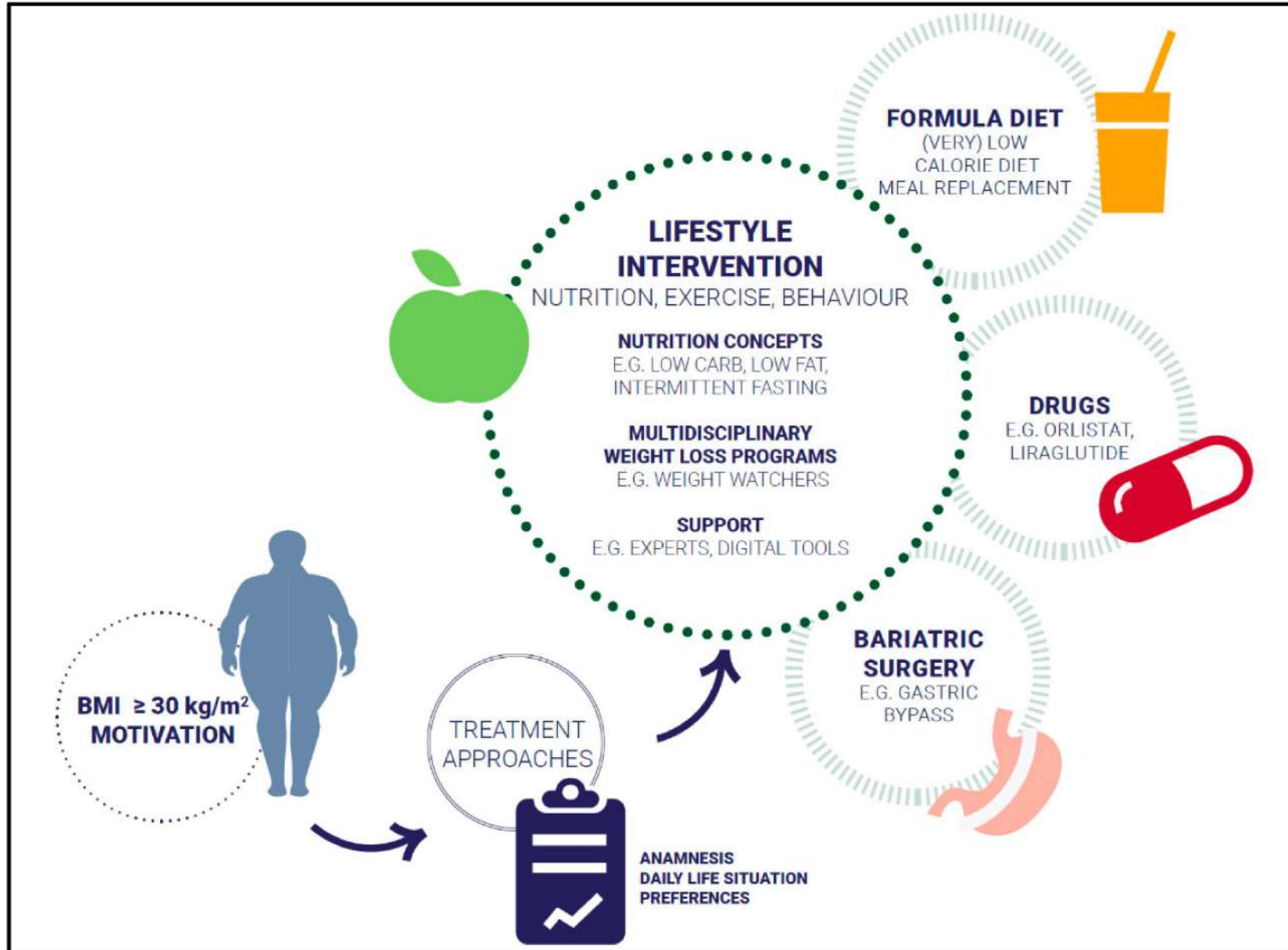




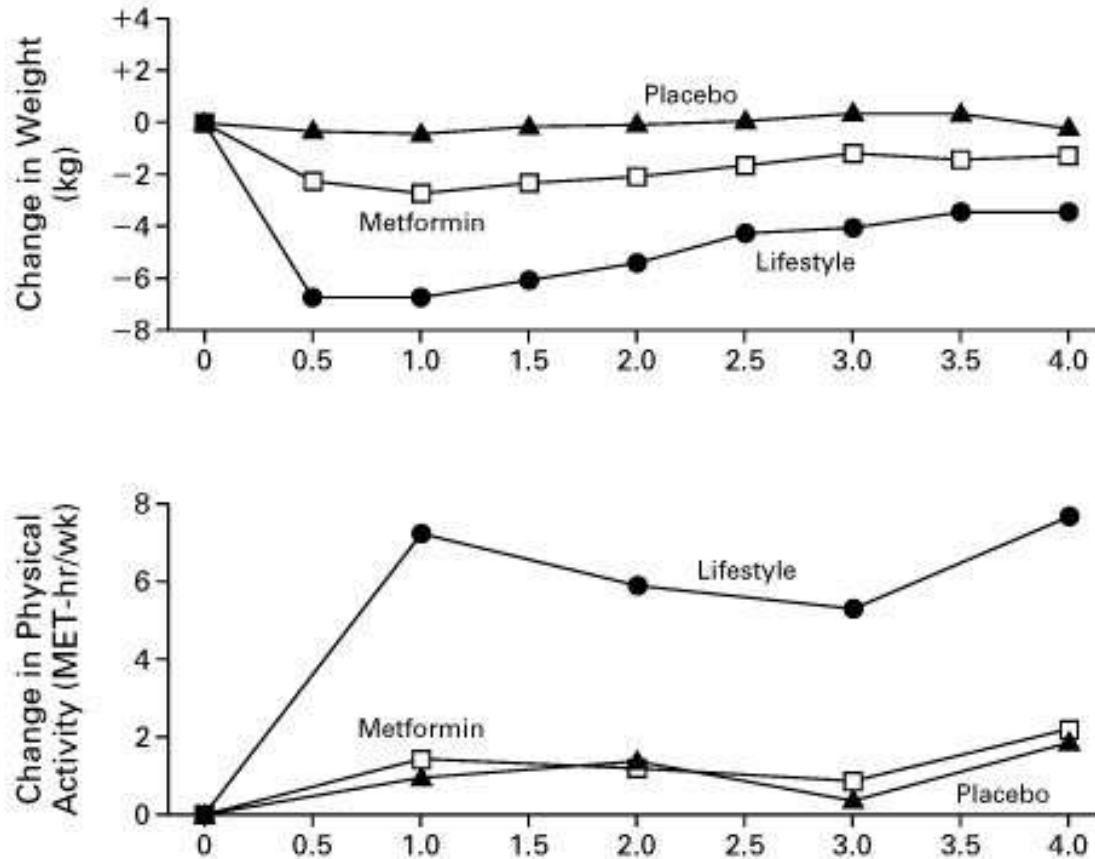
Teresa Mezza & Stefano Balducci

Importanza dello stile di vita: Nutrizione ed Esercizio fisico

Cosa intendiamo per intervento sullo stile di vita?



Lifestyle intervention (diet + exercise)



The goals for the participants assigned to the intensive lifestyle intervention were to achieve and maintain a weight reduction of at least 7 percent of initial body weight through a healthy low-calorie, low-fat diet and to engage in physical activity of moderate intensity, such as brisk walking, for at least 150 minutes per week.

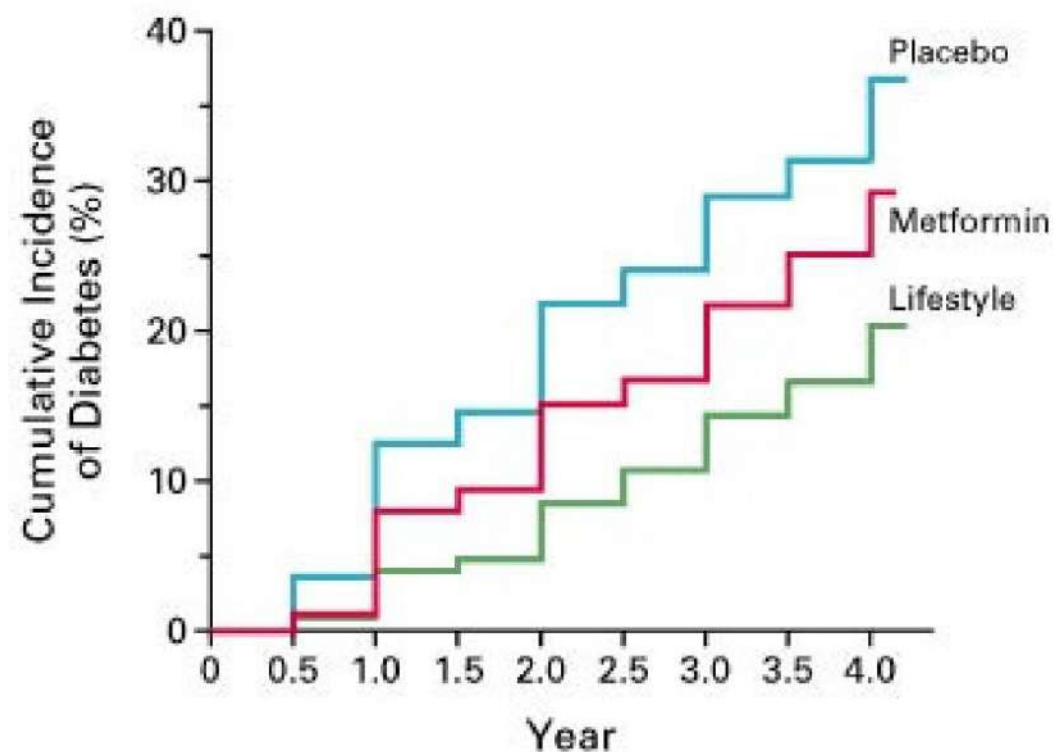
Lifestyle intervention (diet + exercise)

TABLE 1. BASE-LINE CHARACTERISTICS OF THE STUDY PARTICIPANTS. *

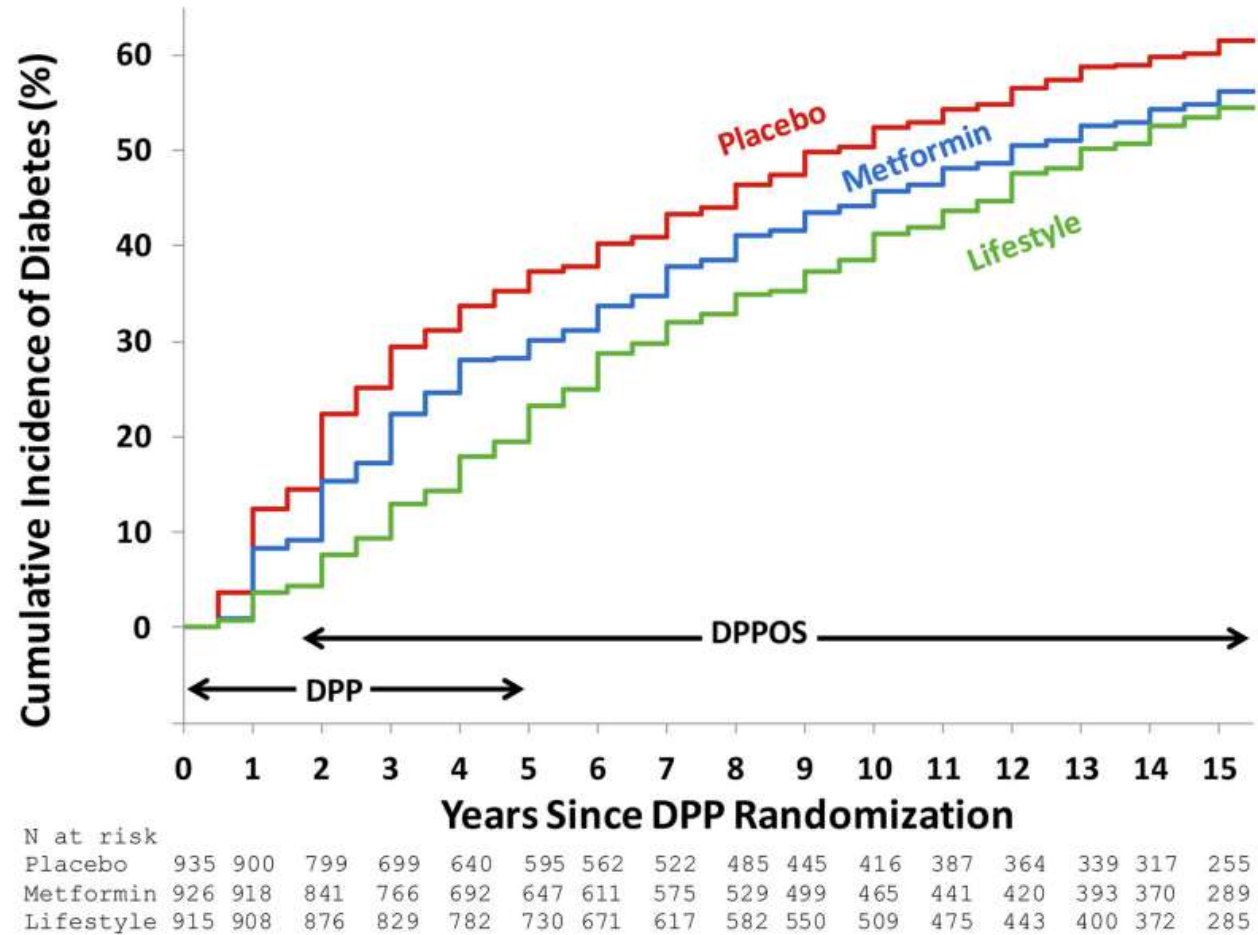
CHARACTERISTIC	OVERALL (N= 3234)	PLACEBO (N=1082)	METFORMIN (N= 1073)	LIFESTYLE (N= 1079)
Sex — no. (%)				
Male	1043 (32.3)	335 (31.0)	363 (33.8)	345 (32.0)
Female	2191 (67.7)	747 (69.0)	710 (66.2)	734 (68.0)
Race or ethnic group — no. (%)				
White	1768 (54.7)	586 (54.2)	602 (56.1)	580 (53.8)
African American	645 (19.9)	220 (20.3)	221 (20.6)	204 (18.9)
Hispanic	508 (15.7)	168 (15.5)	162 (15.1)	178 (16.5)
American Indian	171 (5.3)	59 (5.5)	52 (4.8)	60 (5.6)
Asian†	142 (4.4)	49 (4.5)	36 (3.4)	57 (5.3)
Family history of diabetes — no. (%)	2243 (69.4)	758 (70.1)	733 (68.3)	752 (69.8)‡
History of gestational diabetes — no. of women (%)	353 (16.1)	122 (16.3)	111 (15.7)‡	120 (16.3)
Age — yr	50.6±10.7	50.3±10.4	50.9±10.3	50.6±11.3
Weight — kg	94.2±20.3	94.3±20.2	94.3±19.9	94.1±20.8
Body-mass index	34.0±6.7	34.2±6.7	33.9±6.6	33.9±6.8
Waist circumference — cm	105.1±14.5	105.2±14.3	104.9±14.4	105.1±14.8
Waist-to-hip ratio	0.92±0.09	0.93±0.09	0.93±0.09	0.92±0.08
Plasma glucose — mg/dl§				
In the fasting state	106.5±8.3	106.7±8.4	106.5±8.5	106.3±8.1
Two hours after an oral glucose load	164.6±17.0	164.5±17.1	165.1±17.2	164.4±16.8
Glycosylated hemoglobin — %	5.91±0.50	5.91±0.50	5.91±0.50	5.91±0.51
Leisure physical activity — MET-hr/wk¶	16.3±25.8	17.0±29.0	16.4±25.9	15.5±22.1

Incidence of diabetes (vs placebo)

- 58% with intensive lifestyle intervention
- 31% with metformin



...durability of Lifestyle intervention



Incidence of diabetes:

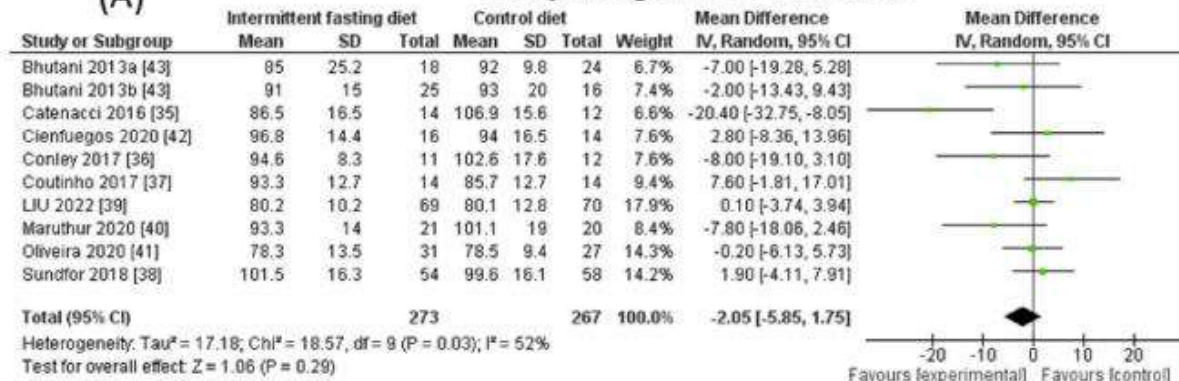
- 27% in the lifestyle intervention group (hazard ratio 0.73, 95% CI 0.65–0.83; $p < 0.0001$)

- 18% in the metformin group (0.82, 0.72–0.93; $p = 0.001$)

Quale dieta? Digiuno intermittente vs control diet?

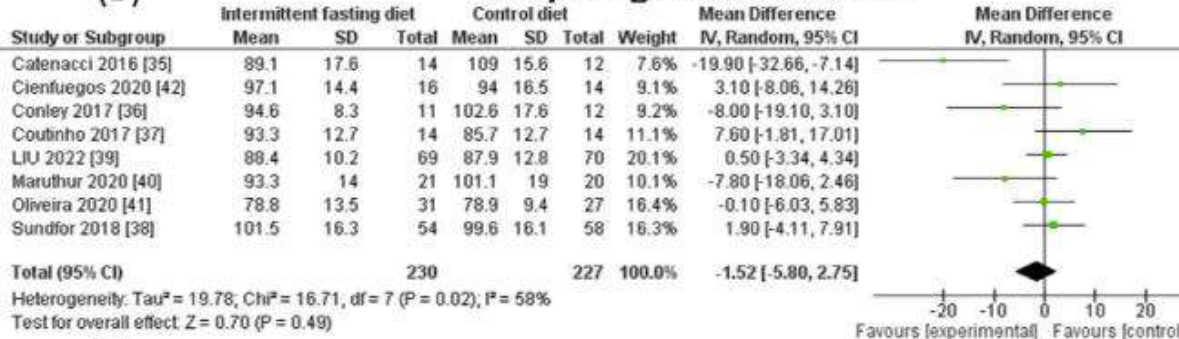
(A)

Body weight at 2-4 months



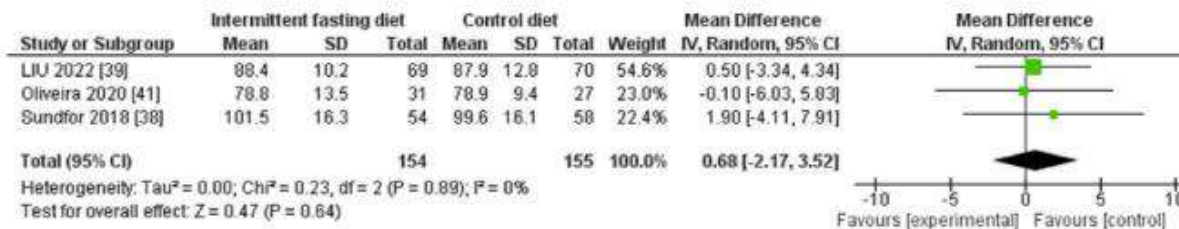
(B)

Body weight at 6-8 months



(C)

Body weight at 10-14 months

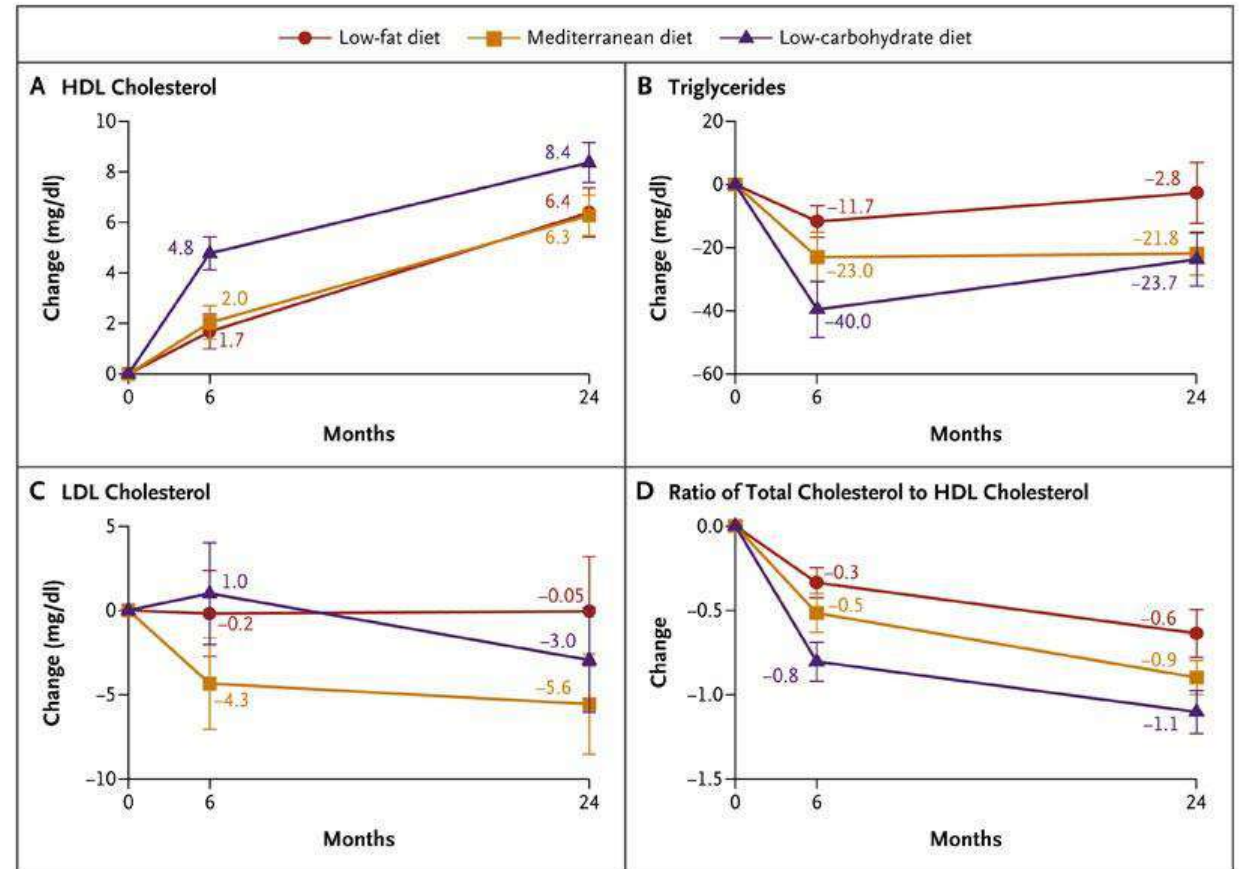
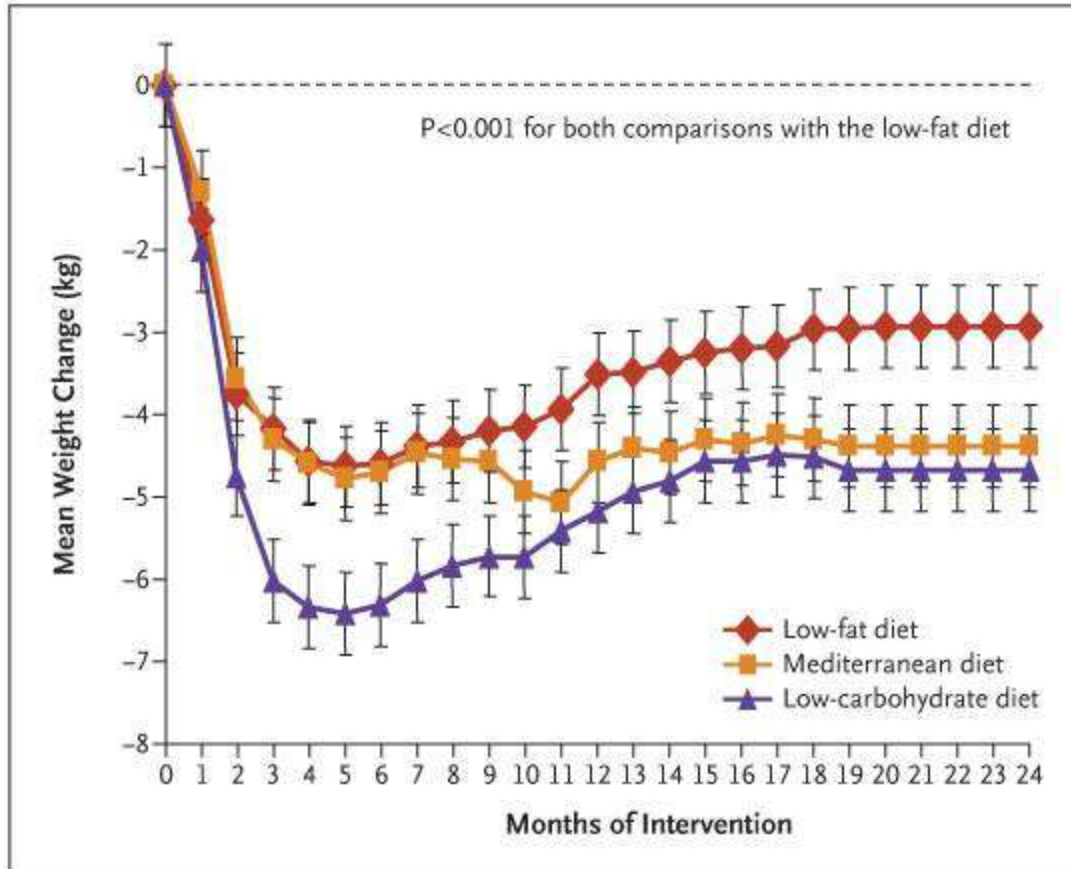


EXPERIMENTAL Diets:
 Intermittent fasting (IF)
 Time-restricted eating (TRE)
 Periodic fasting (PF)

CONTROL diets:
 reduced caloric intake (CR diet)
 unrestricted daily caloric amount (ad libitum diets).

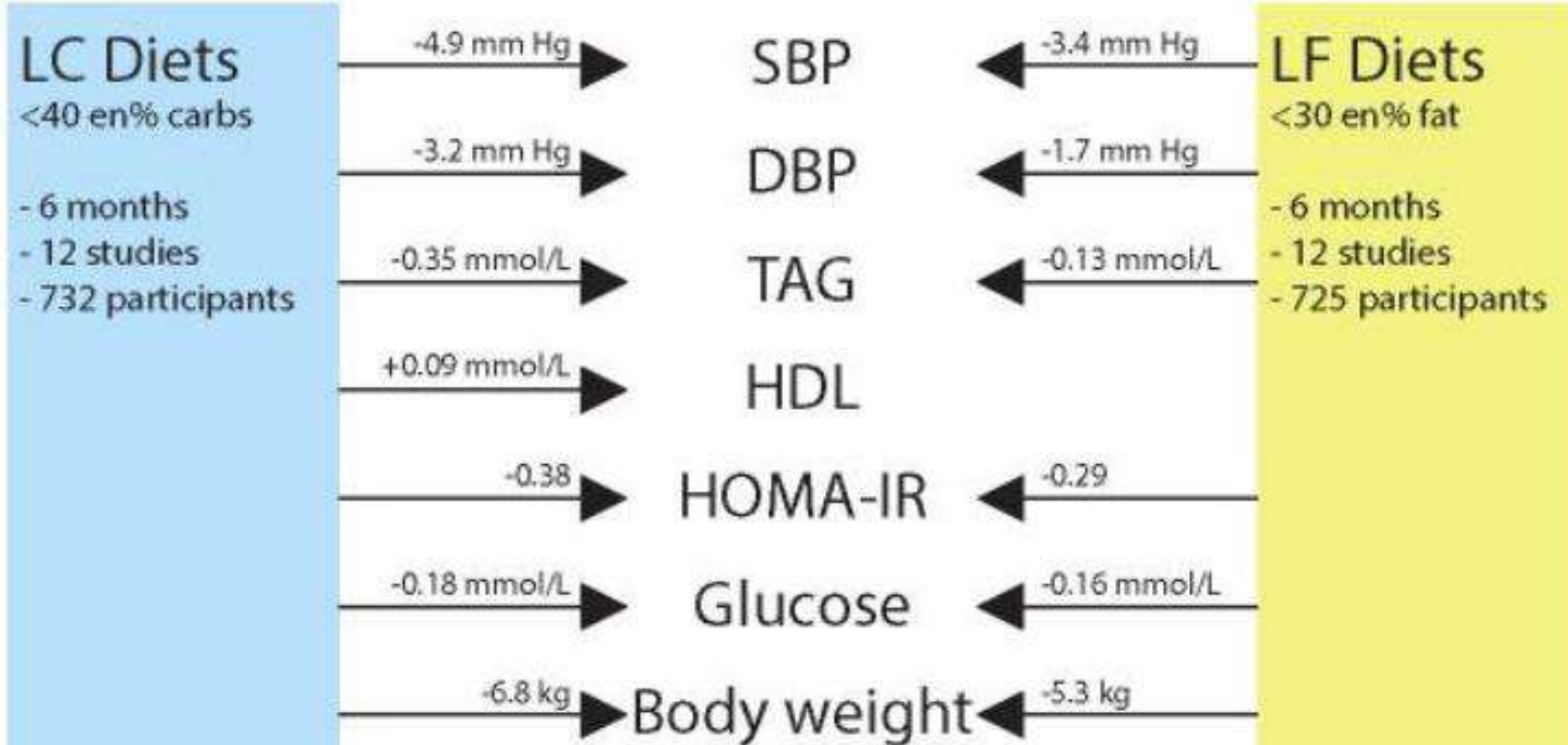
IF diets seem to be no more effective, nor less effective, than non-intermittent fasting diets, in inducing weight loss in patients with obesity

Quale dieta: low fat vs low carb vs mediterranean?



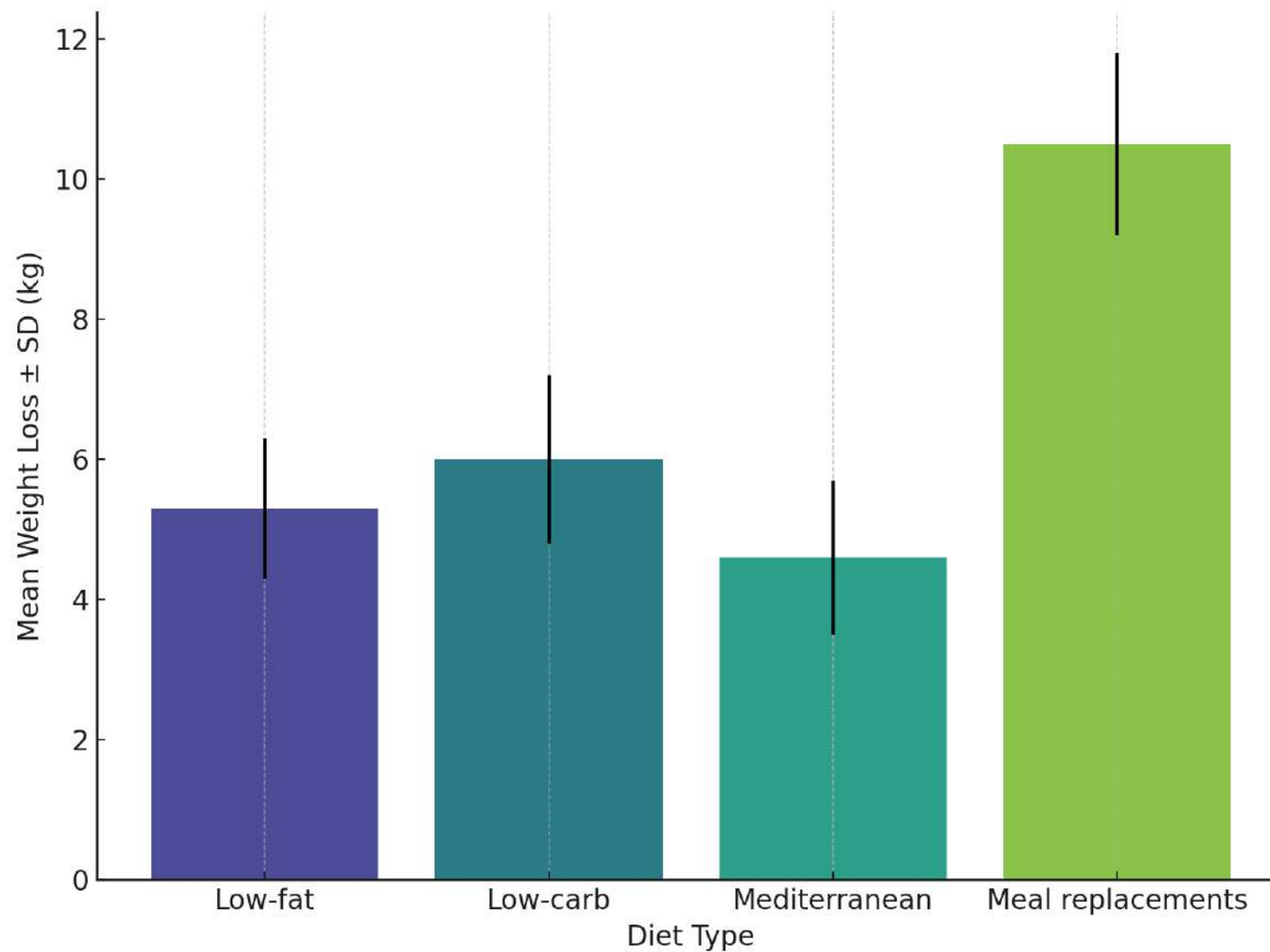
Quale dieta: low fat o low carb?

Meta-analysis per diet type



Quale dieta? Strategie dietetiche a confronto

(calo ponderale medio a 12 mesi)

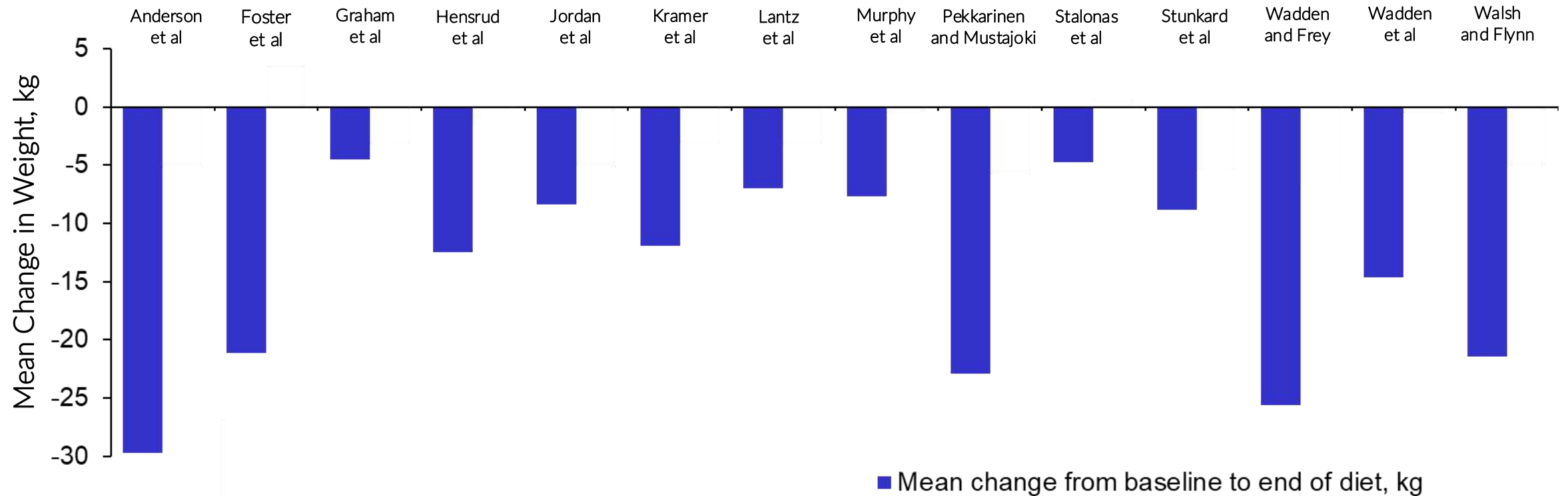


Nutrizione: Raccomandazioni pratiche

Item	Recommendation	Implementation
Energy density	Prefer low energy dense food. Choose food with lower energy content per 100 g.	Salami → ham Rice → potatoes Cream cake → fruit tart
Dietary fat	Watch out for hidden fats. Choose food low in fat, or pick the fat-reduced alternative. Prefer fat-reduced food preparing methods. Choose methods without adding fat.	Potato chips → pretzel sticks Butter, cream cheese → low fat-cream cheese Frying → braising Roasting → cooking Chips → boiled potatoes
Plant-based food	Take five portions a day of vegetables and fruits. Choose plant-based food instead of meat.	Wheat noodles → zucchini pasta Mascarpone cream → fresh fruit for dessert Meat bolognese → vegetable bolognese
Dietary fiber	Increase dietary fibre intake to 25 to 30 g a day. Choose whole grain products, legumes, vegetables, fruits.	White noodles → whole grain noodles White bread → whole grain bread Rice → legumes
Beverages	Drink caloric-free beverages. Choose beverages without sugar and calories.	Water and tea Coffee without sugar Beverages with artificial sweeteners instead of sugar-sweetened beverages

La dieta è efficace per la perdita di peso....

Mean Change in Weight From Baseline to End of Diet



Conclusioni (1)

L'obesità è una malattia cronica multifattoriale

Va affrontata con un approccio integrato: nutrizione, esercizio, supporto psicologico, terapia farmacologica e, se indicata, chirurgia.

La nutrizione è il pilastro iniziale e continuo della terapia

Un deficit calorico moderato, sostenibile e personalizzato è efficace indipendentemente dalla composizione dei macronutrienti.

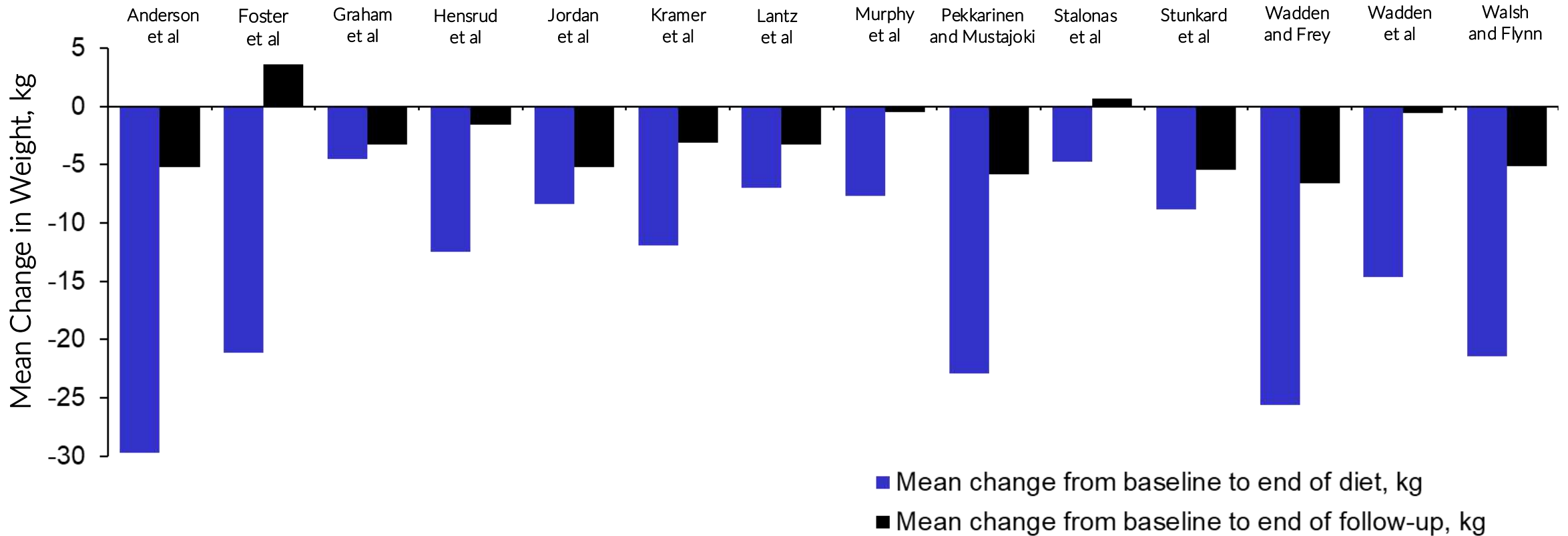
L'aderenza è più importante della “migliore dieta”

Le metanalisi dimostrano che i principali approcci dietetici (low-carb, low-fat, mediterranea) hanno efficacia comparabile a 12 mesi se seguiti con costanza.

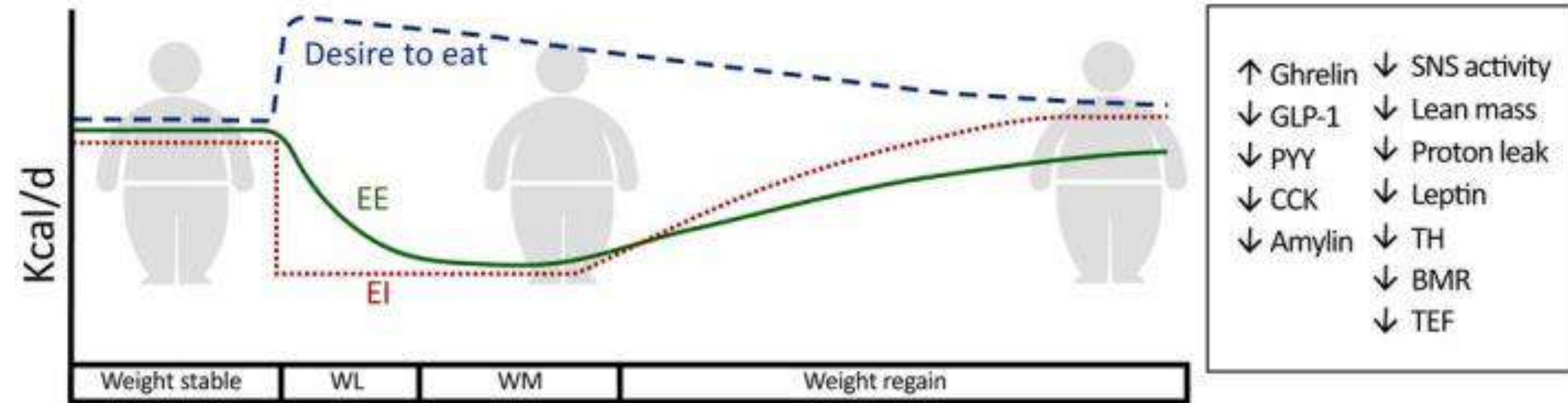
**PERSONALIZZAZIONE DELLA DIETA SULLA BASE DELLE
PREFERENZE E DI OBIETTIVI SPECIFICI**

... ma non per il mantenimento del calo ponderale

Mean Change in Weight From Baseline to End of Diet or Follow-Up



Aumento dell'appetito e riduzione della spesa energetica durante restrizione calorica



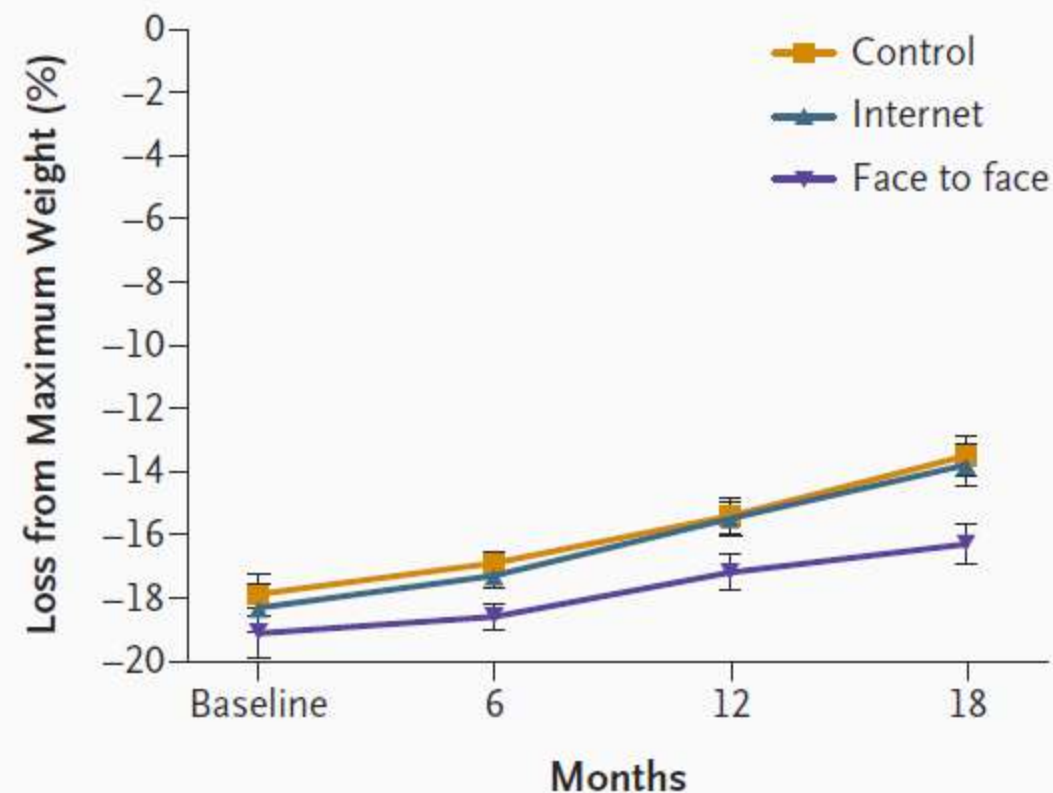
ORIGINAL ARTICLE

A Self-Regulation Program for Maintenance of Weight Loss

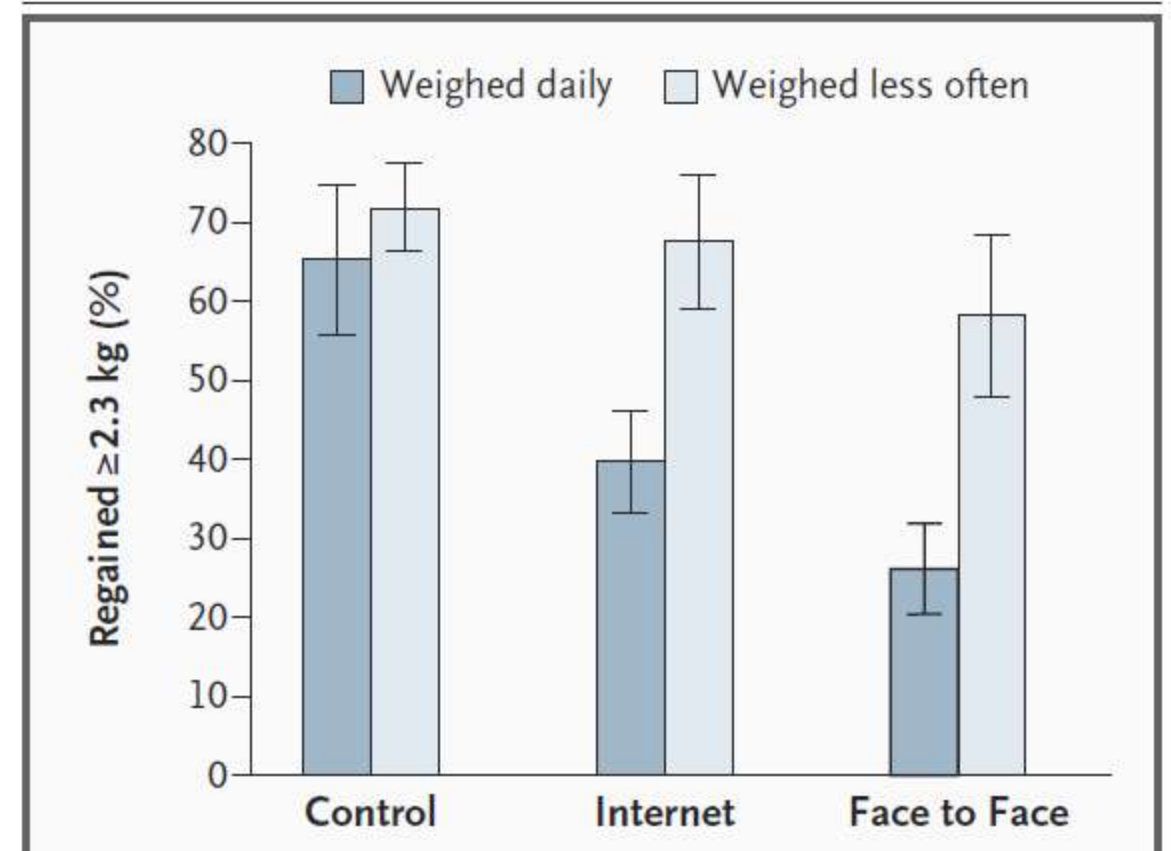
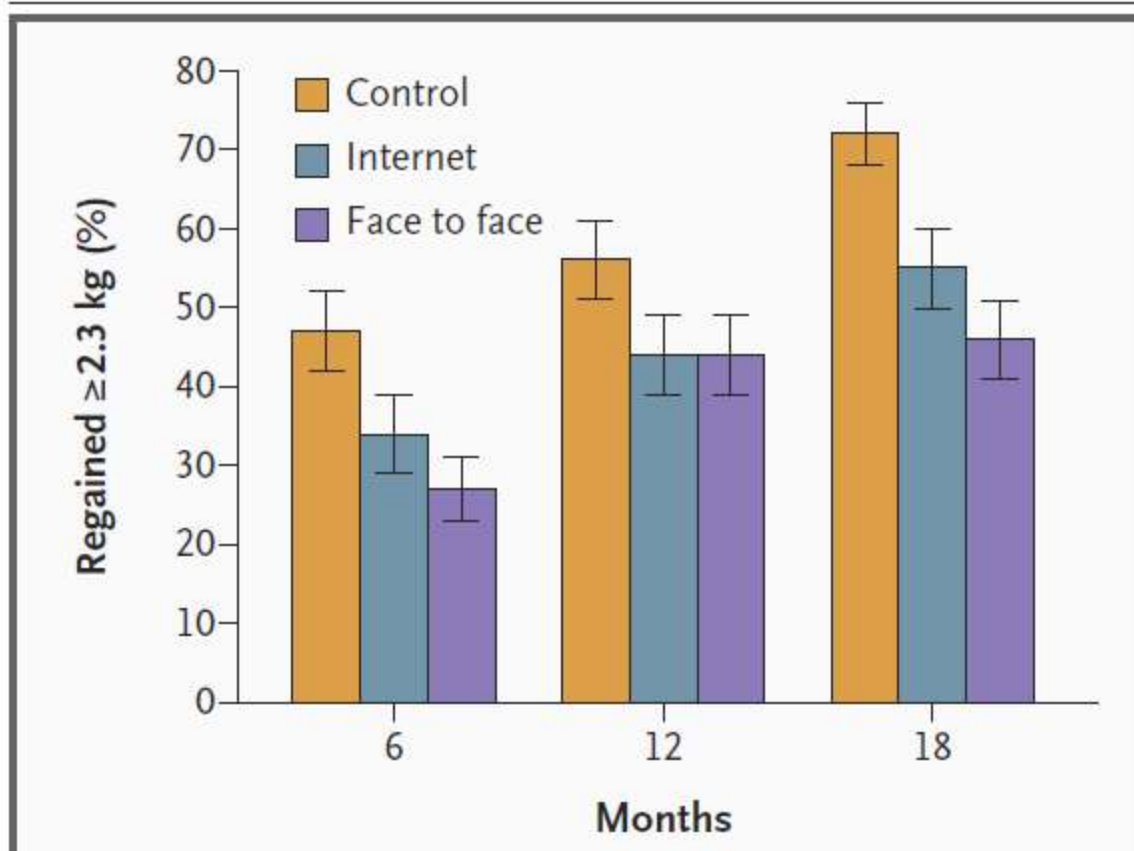
Rena R. Wing, Ph.D., Deborah F. Tate, Ph.D., Amy A. Gorin, Ph.D.,
Hollie A. Raynor, Ph.D., and Joseph L. Fava, Ph.D.

Table 1. Baseline Characteristics of the Study Participants.*

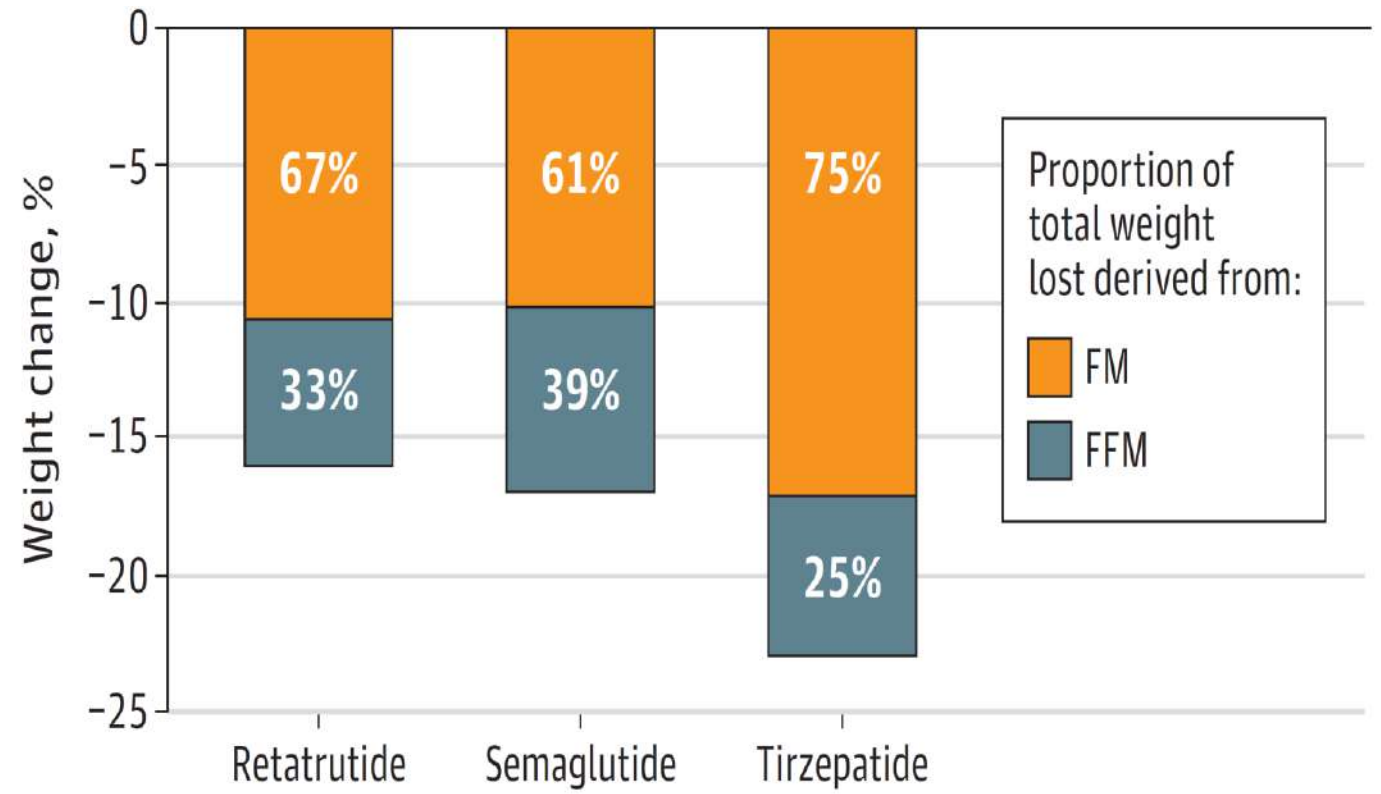
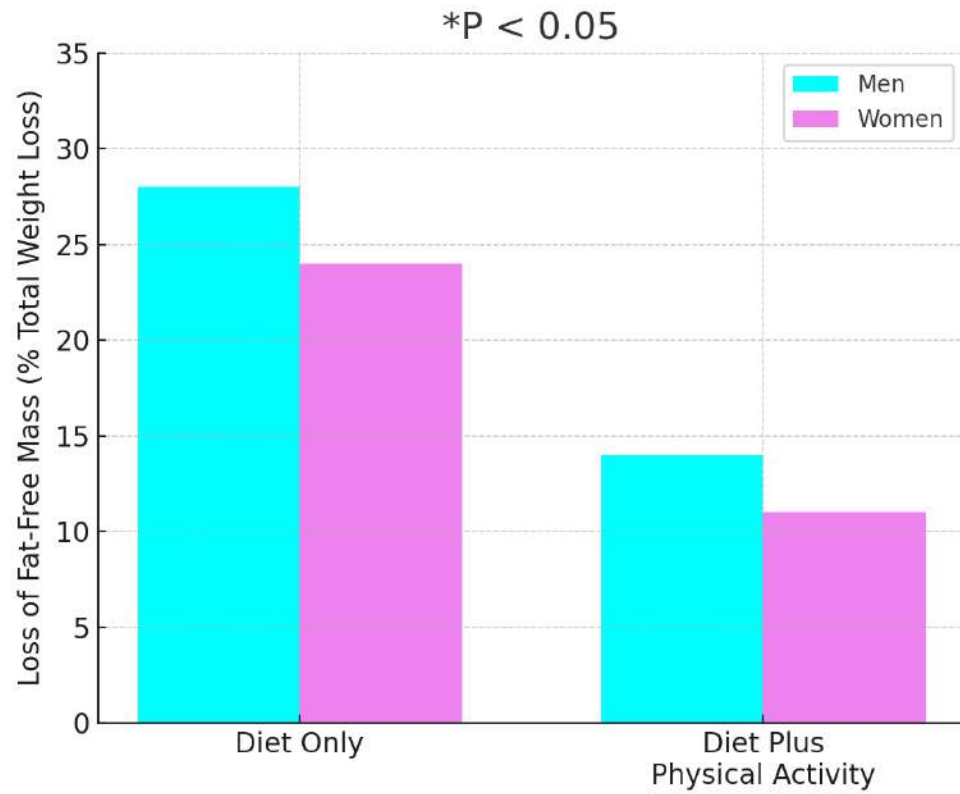
Characteristic	Control (N=105)	Internet (N=104)	Face to Face (N=105)
Female sex (%)	82.9	80.8	80.0
Age (yr)	52.0±10.8	50.9±9.3	51.0±10.3
Weight (kg)	78.8±14.8	76.0±16.4	78.6±17.1
Body-mass index†	29.1±5.0	28.1±4.6	28.7±4.7
Weight loss from highest weight in prior 2 yr (kg)	18.6±10.3	19.2±11.1	20.0±11.6
Weight loss from highest weight in prior 2 yr (%)	17.9±7.0	18.3±7.7	19.1±8.0
Duration of weight loss (mo)	13.1±8.1	12.8±7.3	13.7±7.0
Caloric intake (kcal/day)‡	1562±617	1693±610	1636±635
Calories from fat (%)‡	33.5±8.8	34.5±8.3	35.0±8.8
Physical activity (kcal/wk)§	1794±1295	2194±1557	1990±1460



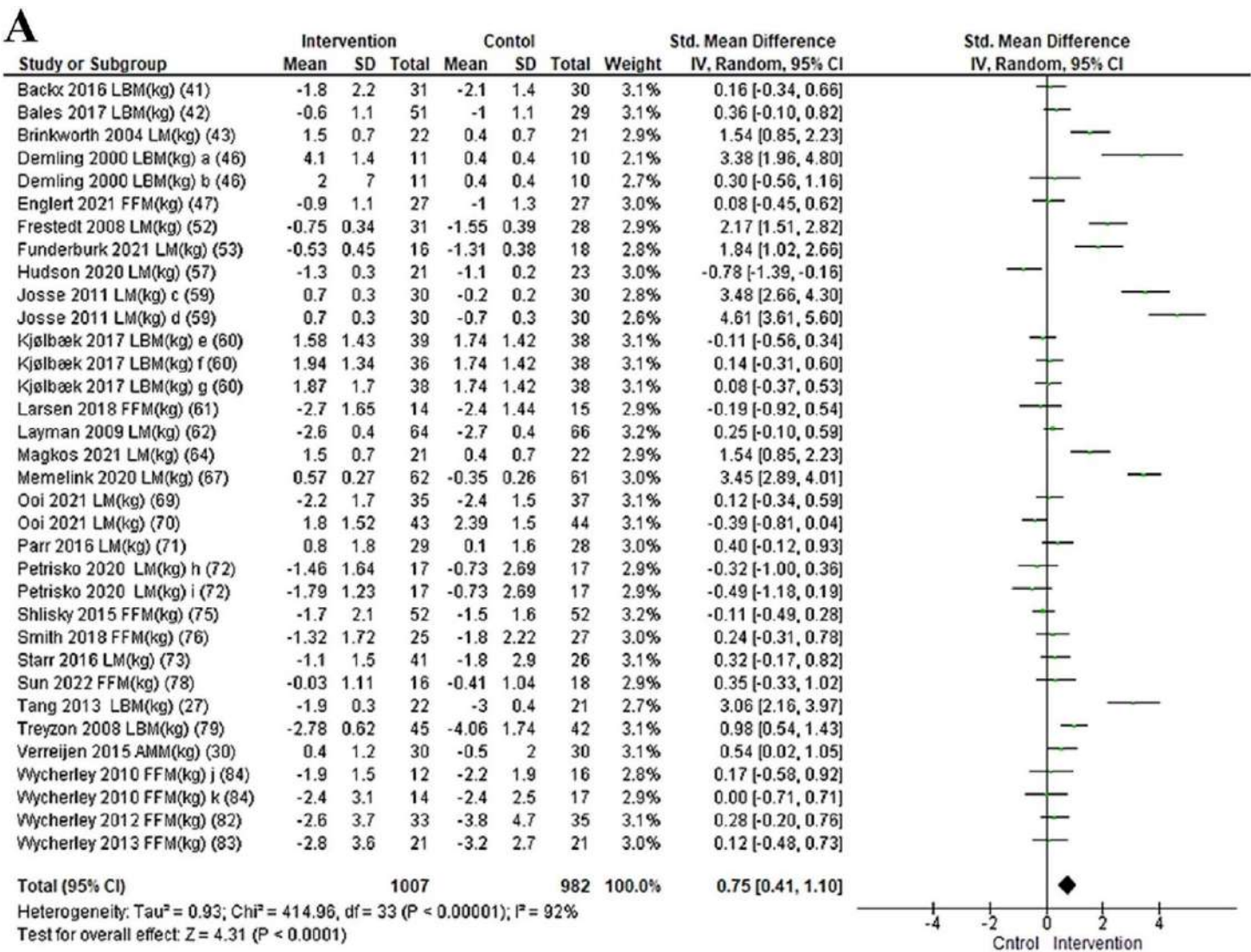
Come mantenere il peso corporeo?



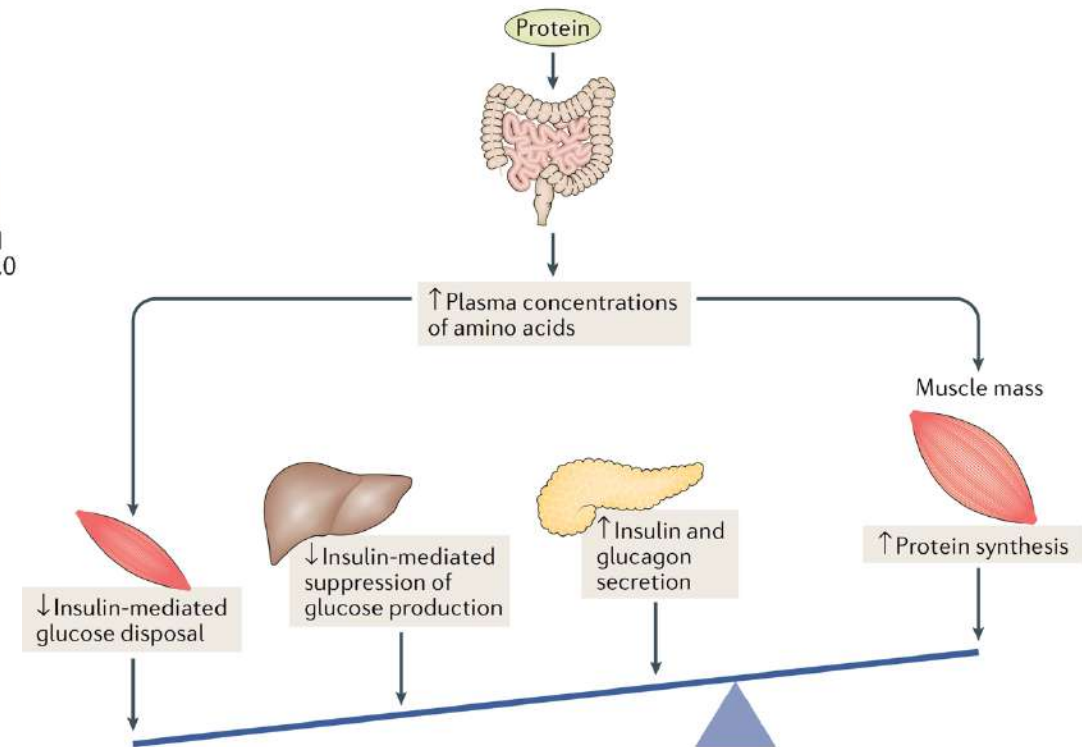
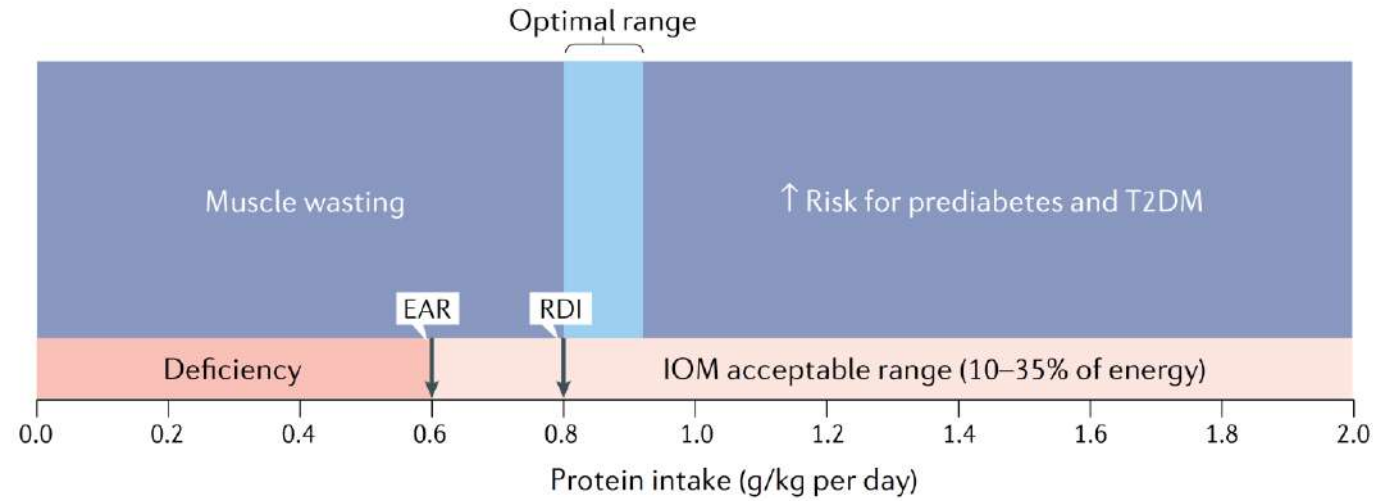
Lean soft mass loss during weight loss



Enhanced protein intake preserves lean soft mass during weight loss

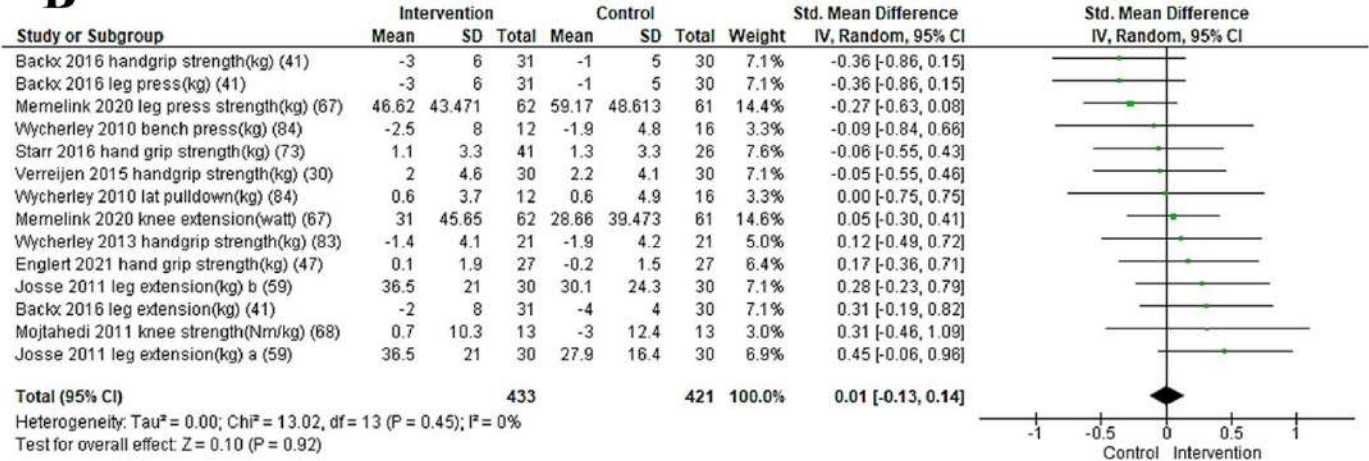


What is the optimal amount of protein intake?

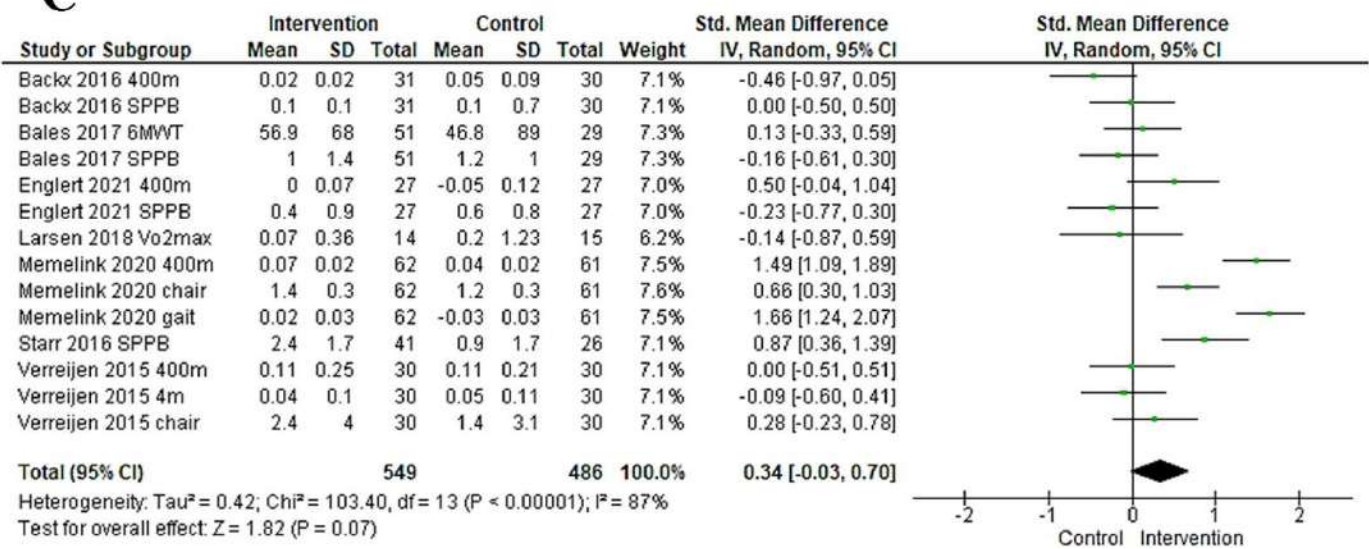


Enhanced protein intake does not preserve muscle strength/physical function during weight loss

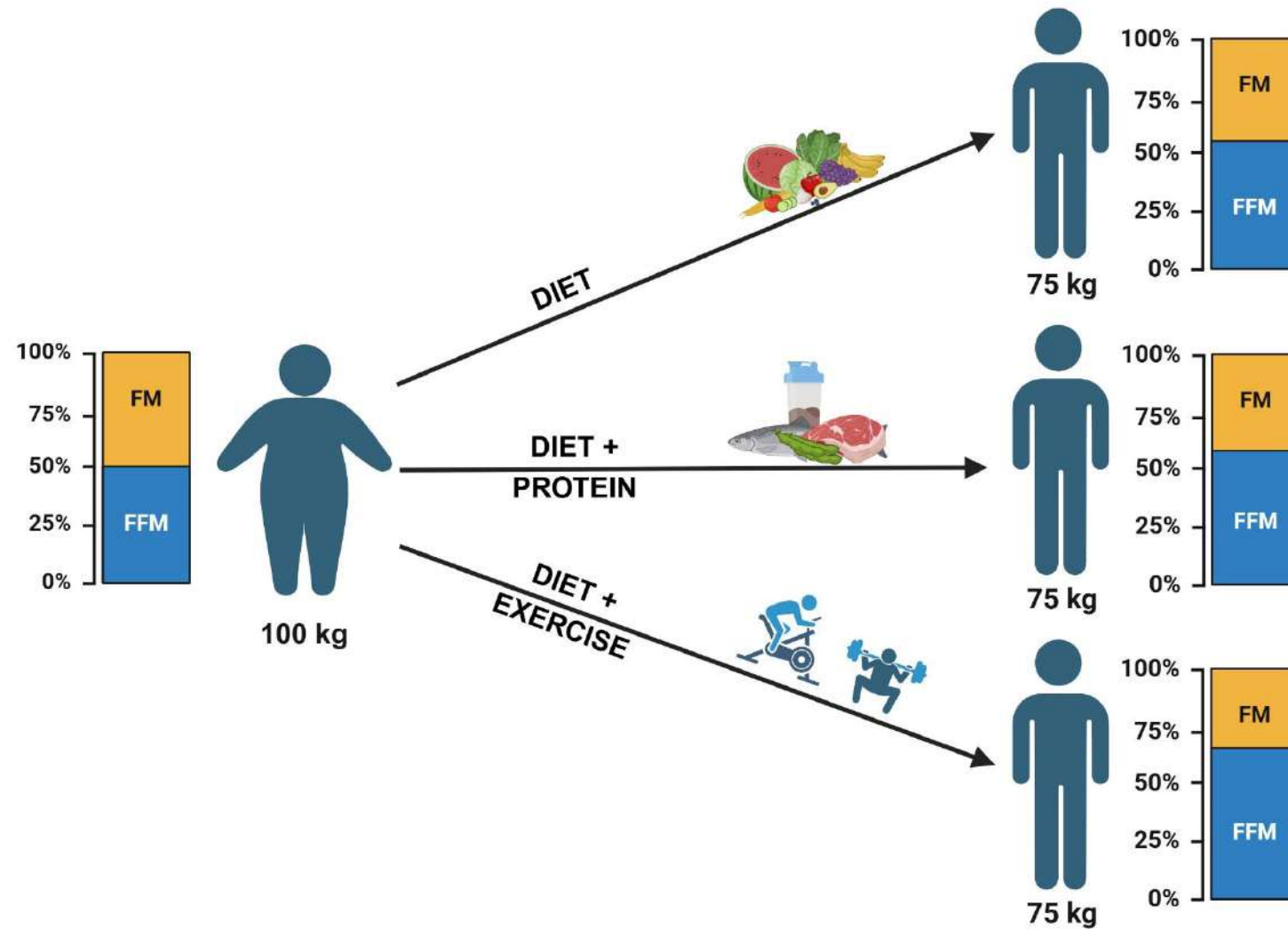
B



C



Preservation of lean soft body mass (and function)



Criticità e conclusioni

- Recupero del peso

- **Educazione nutrizionale e monitoraggio regolare sono essenziali**

Per mantenere i risultati a lungo termine e prevenire il recupero ponderale (weight cycling).

- Perdita di massa magra

- **La perdita di peso non controllata può compromettere la massa magra**

Fino al 25–30% del peso perso può derivare da FFM in assenza di un adeguato apporto proteico e attività fisica.

- **Lo stile di vita non è un'opzione: è una terapia di prima linea**

Da integrare stabilmente nella presa in carico del paziente con obesità.

La Nutrizione è il primo passo, ma da sola non basta: è solo integrando l'esercizio fisico che possiamo realmente preservare la massa magra, migliorare la composizione corporea e rendere sostenibile il calo ponderale.