

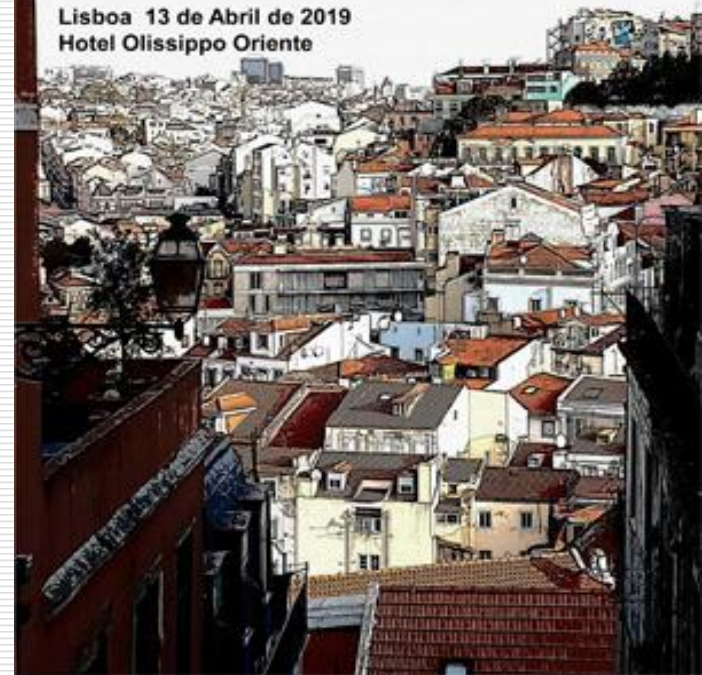
CASO CLÍNICO

Alimentação e Melhoria de Estilo de Vida

**J. Sequeira
Duarte**

Curso Avançado de Lipidologia
Sociedade Portuguesa de Aterosclerose

Lisboa 13 de Abril de 2019
Hotel Olissippo Oriente



endocrinologia@chlo.min-saude.pt

H, 51 anos, programador informático e blogger

□ Obesidade grau III desde os 34 anos

■ Enviado pela Consulta de Cardiologia do n. Hospital, em 2009

- **Miocardiopatia dilatada (FEjVE 30-35%) de etiologia isquémica com regurgitação mitral moderada a grave**

- Portador de Cardioversor Desfibrilhador implantável (**CDI**) desde 2006 (prevenção primária)

- **Fibrilhação auricular paroxística, anticoagulado**

- **HTA controlada com 4 fármacos,**

- **Alteração da glicemia em jejum, dislipidemia tratada com estatina,**

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Data	Peso	IMC	Cint a	PAs	PAd	Glic jj	Creat	AcUrico	Trig	Col	HDL	LDL	Insulina	AST	ALT	gGT
15/12/2015	173	47	160			99	0,82	7,4	78	100	27	58	37	24	23	53
01/06/2015	175	48	160			118	0,75	6,6	80		32	99	59,9	34	35	48
04/07/2014	172	47	156	99	57	122	0,9	7,6	141	147	29	90	56,8	31	45	54
20/01/2014	171	46	159	134	85	99			108	162						
29/05/2013	170	46	149			108	0,76	5,8	113	147	33	91	44,4	29	45	49

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Nome	mg	J.	P.A.	Alm.	L.	J.
Pantoprazol	20mg	1				
Lasix	40mg	1				
Amiodarona	200mg		1			
Mononitrato Isossorbido	60mg		1			
Lisinopril	20mg		1/2			
Carvedilol	25mg		1/2			1/2
Alopurinol	300mg		1			
Fluoxetina	20mg		1			
Espironolactona	25mg			1		
Clopidogrel	75mg			1		
Atorvastatina	10mg					1
Diulo	5mg	Dias Alternados				1/2
Varfine	5mg	Dose Variável Dependendo de Análise				1 1/4

Suspe

Tudo bem?

EASO

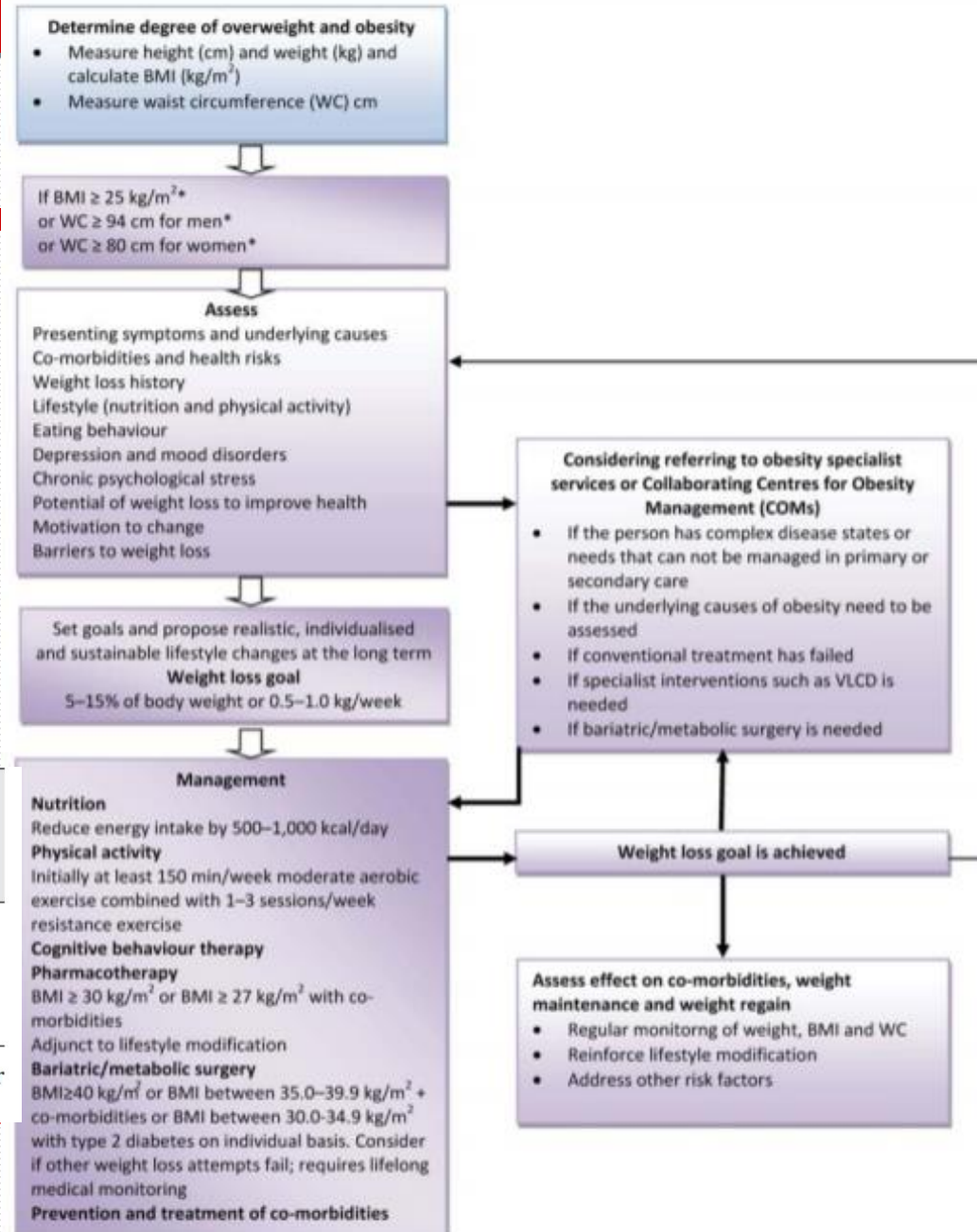
European Guidelines for Obesity Management in Adults

2015

BMI, kg/m ² *	WC, cm*		Co-morbidities
	men < 94, women < 80	men ≥ 94, women ≥ 80	
25.0–29.9	L	L	L ± D
30.0–34.9	L	L ± D	L ± D ± S**
35.0–39.9	L ± D	L ± D	L ± D ± S
≥40.0	L ± D ± S	L ± D ± S	L ± D ± S

L = Lifestyle intervention (diet and physical activity); D = consider drugs; S = consider surgery.

Clinical care pathway for overweight and obese adults



Após incumprimento de múltiplas dietas propostas , foi colocado Balão Intra Gástrico em 11-10-2011 c/ 164,5 removeu em jan.2012 c/ 145 kg.



Continuava com IMC 40. Estava em programa de tratamento cirúrgico de obesidade, recusado pela anestesia



CARACTERIZAÇÃO DAS DIETAS BASE _19

- Geral_20
- Ligeira_21
- Líquida_22
- Líquida Reforçada_23
- Ovolactovegetariana_24
- Vegetariana_25

CARACTERIZAÇÃO DAS DIETAS VARIANTES _27

- Baixo Teor Microbiano_28
- Cremosa_28
- Isenta de Glúten_29
- Mole_29
- Reforçada em Energia_29
- Restrita em Energia_30
- Restrita em Fibra Dietética e Resíduos_30
- Restrita em Lactose_31
- Restrita em Potássio_31
- Restrita em Sal_32

Weight Watchers and Slim-Fast top diets

According to a recent analysis of diets by Consumer Reports magazine, Weight Watchers and Slim-Fast are the most effective diets.

DIETS	AVERAGE DAILY CALORIES	Fruits and veggies**	Grams of fiber*	Protein	Carbohydrates	Saturated fat	Fat
Weight Watchers	1,450	24	7	56	20	20	11
Slim-Fast	1,540	22	6	57	21	21	12
Zone (men's menu)	1,660	27	7	42	30	21	17
Ornish (Eat More, Weigh Less)	1,520	6	1	77	16	31	17
Atkins (Ongoing weight loss)	1,520	60	20	11	29	12	6
Atkins (Induction)	1,640	61	19	8	31	8	6
eDiets	1,450	23	5	53	24	19	12
Jenny Craig	1,520	18	7	62	20	16	6
South Beach (Phase One)	1,530	51	14	15	34	9	12
South Beach (Phase Two)	1,340	39	9	38	22	19	13
Volumetrics	1,500	23	7	55	22	20	14



← 203 gm carbohydrates

← 220 gm carbohydrates

← 292 gm carbohydrates

← 236 gm carbohydrates

Que propor?

<https://www.apn.org.pt/documentos/manuais/Linhas orientadoras para a construcao de um Manual de Dietas APN2017.pdf>

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- Em internamento iniciou dieta de muito baixo valor calórico (350 kcal), passando a baixo valor calórico (600Kcal) contando as calorias em casa.

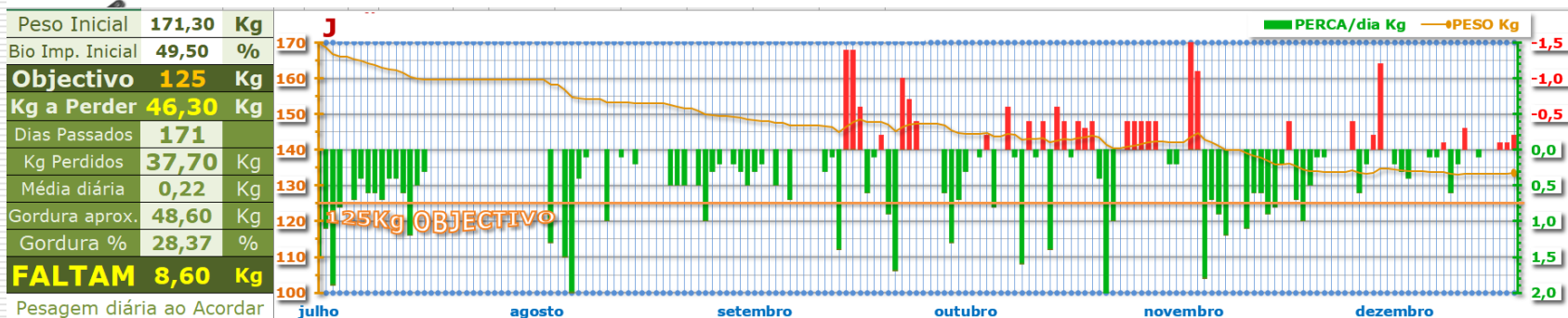
Igrediente	KCal/100g	Peso	Kcal	Igrediente	KCal/100g	Peso	Kcal
Abóbora Cozida	37	160	59,2	Carne Porco Assado	247	0	0,0
Agrinhos	11	0	0,0	Arraia Cozida	97	0	0,0
Alface	15	0	0,0	Atum Assado/Grelhado	153	0	0,0
Alho	149	0	0,0	Bacalhau Cozido	105	0	0,0
Alho Francês	61	0	0,0	Bacalhau Grelhado/Assado	122	0	0,0
Beterraba Crua	43	0	0,0	Carapau Cozido	105	0	0,0
Brócolos Cozidos	54	0	0,0	Carapau Grelhado	134	0	0,0
Cebola	40	0	0,0	Carne Porco Cozido	271	0	0,0
Cebola Cozida	58	0	0,0	Carne Porco Grelhado	240	0	0,0
Cenouras	41	0	0,0	Carne Vaca Assada	267	0	0,0
Cenouras Cozidas	54	0	0,0	Carne Vaca Cozida	252	0	0,0
Chuchu Cozido	24	140	33,6	Carne Vaca Grelhada	239	0	0,0
Coentros / Grelos	23	0	0,0	Cavala Cozida	167	0	0,0
Cozumelos Salteados	26	0	0,0	Choco Grelhado	106	0	0,0
Courgette	17	0	0,0	Dourada Grelhada	185	0	0,0
Grão de bico Cozido	180	0	0,0	Fiambré	272	0	0,0
Repolho/Couve/Couve Flor/Grelos	22	0	0,0	Franco Assado/Grelhado	237	0	0,0
Espinafres Cozidos	40	0	0,0	Franco Cozido	160	0	0,0
Feijão	80	0	0,0	Leite Magro 100 ml	43	0	0,0
Lombardo/Repolho Cozido	42	0	0,0	Lulas Grelhadas	120	0	0,0
Nabica	23	0	0,0	Lulas Grelhadas	120	0	0,0
Nabo	28	0	0,0	Ovo Cozido 1 aprox. 50g	154	0	0,0
Papino	16	0	0,0	Tentáculos pota cozida	81	0	0,0
Pimento Vermelho	20	0	0,0	Pato Assado c/pele	336	0	0,0
Rabanetes	16	0	0,0	Pato Assado s/pele	200	0	0,0
Rúcula	25	0	0,0	Peru Bife Grelhado s/pele	152	0	0,0
Tomate	18	200	36,0	Peru Cozido/assado s/pele	170	0	0,0
Favas	61	0	0,0	Pescada Cozida	112	0	0,0
Morangos	33	0	0,0	Polvó Cozido	82	0	0,0
Pássego	39	0	0,0	Queijo Fromage Blanc	73	0	0,0
Ameixas	46	0	0,0	Salmão fumado	117	0	0,0
Laranja	47	0	0,0	Sardinha Assada	215	0	0,0
Limão	30	0	0,0	Tiras de Pota	92	0	0,0
Maça	52	0	0,0	Peixe Espada grelhado	124	0	0,0
Melancia	30	0	0,0	Mexilhões	150	0	0,0
Melão	36	0	0,0	Ameijoas cozidas / bulhão pato	111	0	0,0
Tremoços	119	0	0,0	Berbigões crus	60	0	0,0
Azeite (colher de chá) 3g	884	1	26,5	Percebes	68	0	0,0
Azeite (colher de sopa) 7g	884	2	123,8	Camarão Cozido	98	0	0,0
Pão	265	0	0,0	Sapateira	129	0	0,0
Pão linhaça desidratado (unidade)	31	0	0,0	Ostras aprox. 15g/unidade	68	0	0,0
Vinagre (p/colher de sopa)	6	0	0,0	Delicias do mar aprox.15g/unidade	108	0	0,0
Total KCal. Legumes		Doses	2	279,1	Total KCal. Carnes e Peixes		0,0
						P/Dose	2
							0,0
						Doses	279,1
							139,5
	256,8				Total por Dose		2
							139,5

Pratos grandes feitos	Total Kcal cozinhadas	Doses	Total Kcal/dose
Sopa de Peixe	1621,5	11	147,4
Sopa Vermelha de Tomate	1076,7	7	153,8
Sopa Verde de Nabicas	909,0	9	101,0
Favas quisadas	1311,0	6	218,5
Sopa Pescada e Pota	1062,1	11	96,6
Sopa Cebola, Rama Verde, Grão	1246,8	12	103,9
Cozumelos Recheados	1027,3	6	171,2
Baixas Kcal			
Médias Kcal			
Altas Kcal			
Muito altas Kcal			
Extremamente altas Kcal			
Obscuidade de Kcal - Não listado			
Somas adicionais (Fórmulas)	446,6		Kcal

Pratos grandes feitos	Total Kcal cozinhadas	Doses	Total Kcal/dose
Sopa Couve Feijão Cebola	1233,1	12	102,8
Sopa Couve Feijão Cenoura	1183,4	10	118,3
Sopa Cebola Tomate Pimento	1279,7	11	116,3
Sopa Couve Flor abóbora	901,2	9	100,1
Sopa Cebola AlhoFrancês Nabica	1120,0	10	112,0
Sopa Couve e Feijão	1514,7	14	108,2
Sopa Couve Flor e Grelos de Nabo	918,3	9	102,0

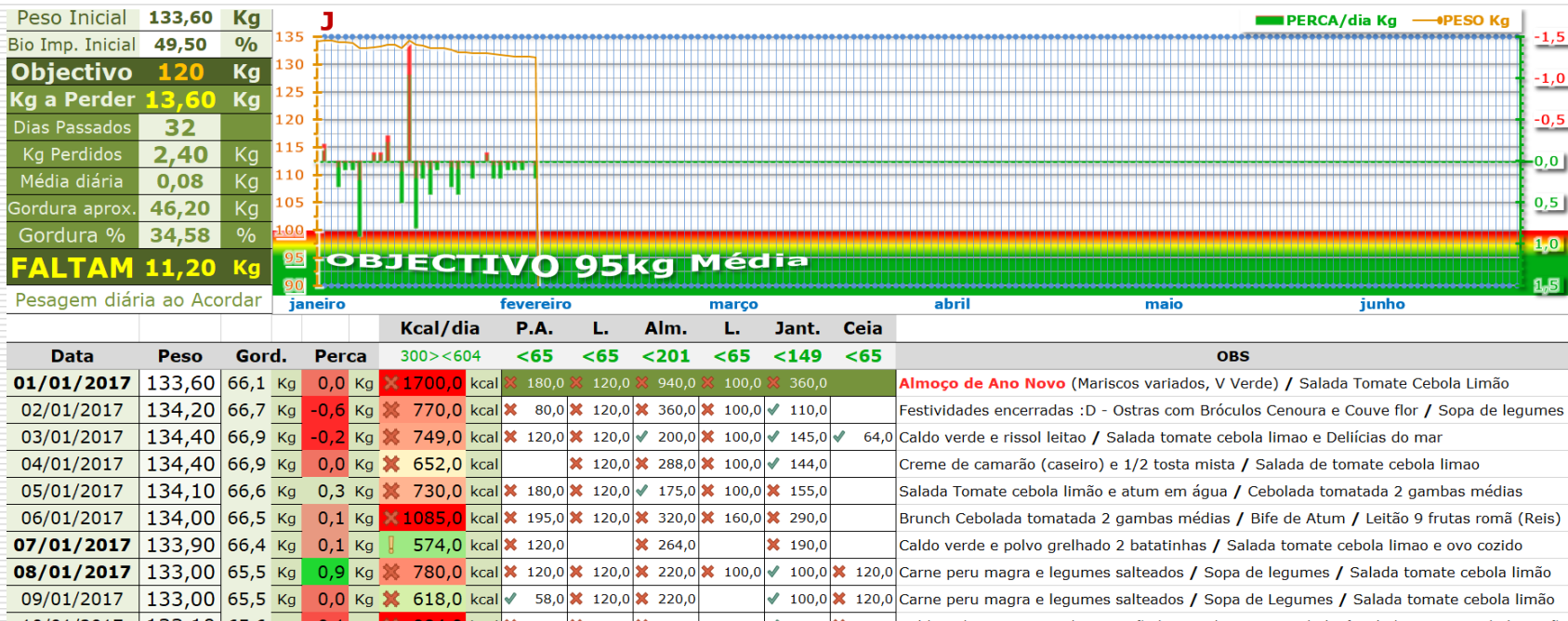
KCal externas adicionais	Peso gr	Acertos Extra	Kcal
Referencia peso/ KCal	100	In ingrediente Ref.	67
In ingrediente adicional	0	In ingrediente usado	0
KCal Adicionadas	0	Resultados	279,1
KCal +/-	71	Entrada Manual	350,1
KCal +/-	0	Entrada Manual	350,1
KCal +/-	0	Entrada Manual	350,1
KCal +/-	0	Entrada Manual	350,1
Doses	1	Divisão p/doses	350,1

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		Kcal/dia		P.A.	L.	Alm.	L.	Jant.	Ceia	OBS	
Data	Peso	Gord.	Perca	300><604	<65	<65	<201	<65	<149	<65	
14/07/2016	171,30	84,8 Kg	0,0 Kg	400,0	kcal	1 S. Mista	1 S. Laran	1 Sopa	1 Chá	1 Sopa 1 Chá	Internado em Egas Moniz - Endocrinologia 153,3 cm perímetro abdominal
15/07/2016	169,80	83,3 Kg	1,5 Kg	400,0	kcal	1 Leite	1 Pão c/man	1 Sopa	1 Leite	1 Sopa 2 Chá	Internado em Egas Moniz - Endocrinologia
16/07/2016	168,70	82,2 Kg	1,1 Kg	400,0	kcal	2 Leite		1 Sopa	1 Chá	2 Sopa 2 Chá	Internado em Egas Moniz - Endocrinologia
17/07/2016	166,80	80,3 Kg	1,9 Kg	400,0	kcal	2 Leite		1 Sopa	1 Leite	1 Sopa 2 Chá	Internado em Egas Moniz - Endocrinologia
18/07/2016	166,00	79,5 Kg	0,8 Kg	400,0	kcal	2 Leite		1 Sopa	1 Chá	1 Sopa 2 Leite	Internado em Egas Moniz - Endocrinologia
19/07/2016	166,00	79,5 Kg	0,0 Kg	400,0	kcal	2 Leite		1 Sopa	1 Chá	1 Sopa 2 Chá	Internado em Egas Moniz - Endocrinologia
20/07/2016	165,30	78,8 Kg	0,7 Kg	400,0	kcal	2 Leite		1 Sopa	1 Chá	1 Sopa 2 Chá	Internado em Egas Moniz - Endocrinologia
21/07/2016	164,90	78,4 Kg	0,4 Kg	400,0	kcal	2 Leite	1 Maçã	1 Sopa	1 Chá	1 Sopa 1 Chá	Internado em Egas Moniz - Endocrinologia 152,3 cm perímetro abdominal
22/07/2016	164,30	77,8 Kg	0,6 Kg	400,0	kcal	2 Leite		1/2 Sopa	1 Chá	1 Sopa 2 Chá	Internado em Egas Moniz - Endocrinologia
23/07/2016	163,70	77,2 Kg	0,6 Kg	400,0	kcal	2 Leite		1 Sopa	2 Leite	1 Sopa 1 Chá	Internado em Egas Moniz - Endocrinologia
24/07/2016	163,00	76,5 Kg	0,7 Kg	400,0	kcal	2 Leite		1 Sopa	2 Chá	1 Sopa 2 Chá	Internado em Egas Moniz - Endocrinologia
25/07/2016	162,60	76,1 Kg	0,4 Kg	400,0	kcal	2 Leite	1 Leite	1 Sopa	2 Chá	1 Sopa 2 Chá	Internado em Egas Moniz - Endocrinologia

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Alcançou uma perda significativa de peso 171 -> 128Kg sob dieta (com 2+2 semanas de internamento) com medidas dietéticas e de estilo de vida desde Dezembro/2015 -> Abril/2017;

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Data	Peso	Cinta	PAs	PAd	Glic jj	Creat	AcUrico	Trig	Col	HDL	LDL	Insulin	AST	ALT	gGT	IMC
16/02/2017	131		116	62	103	0,88	7,2	87	154	39	98		32	33	35	36
30/11/2016	133		125	73	59								25	21		36
24/11/2016	139		134	76	81	0,64							36	34	31	38
17/11/2016	141		136	66	86	0,75	5,4					14,8	24	25	39	38
06/10/2016	146		101	75		0,9							27	25	37	40
28/07/2016	162		104	78	71	1,03	8,1		122				32	34	41	44
27/07/2016	163		111	64												44
22/07/2016	165		120	63	70	0,95	8		137				30	29	47	45
19/07/2016	165		120	59												45
15/07/2016	165		113	74	91	1,11	10,3	124	174	46	103	2,8		30	61	45
01/06/2016	173	165	124	82	96	0,82	6,6	90	151	46	87	27,6	29	28	65	47

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- Recusou o by-pass gástrico quando obteve aprovação da anestesia com a perda de peso, verificou-se evidente melhoria clínica (melhor tolerância ao esforço e ausência de internamentos por insuficiência cardíaca), sem angor ou queixas equivalentes e redução da terapêutica diurética e entretanto ocorreu recuperação de peso, estando atualmente com IMC 40Kg/m² (1.92m, 150kg).

 - **QUE OPÇÕES PROPOR?**
 - **FÁRMACOS ANTI-OBESIDADE?**
 - **NOVO BALÃO INTRA-GÁSTRICO?**
 - **CIRURGIA BARIATRICA?**
 - **BAIXAR LDL PARA 70mg/dL?**
 - **OUTRAS?**
-

Fármacos anti-obesidade

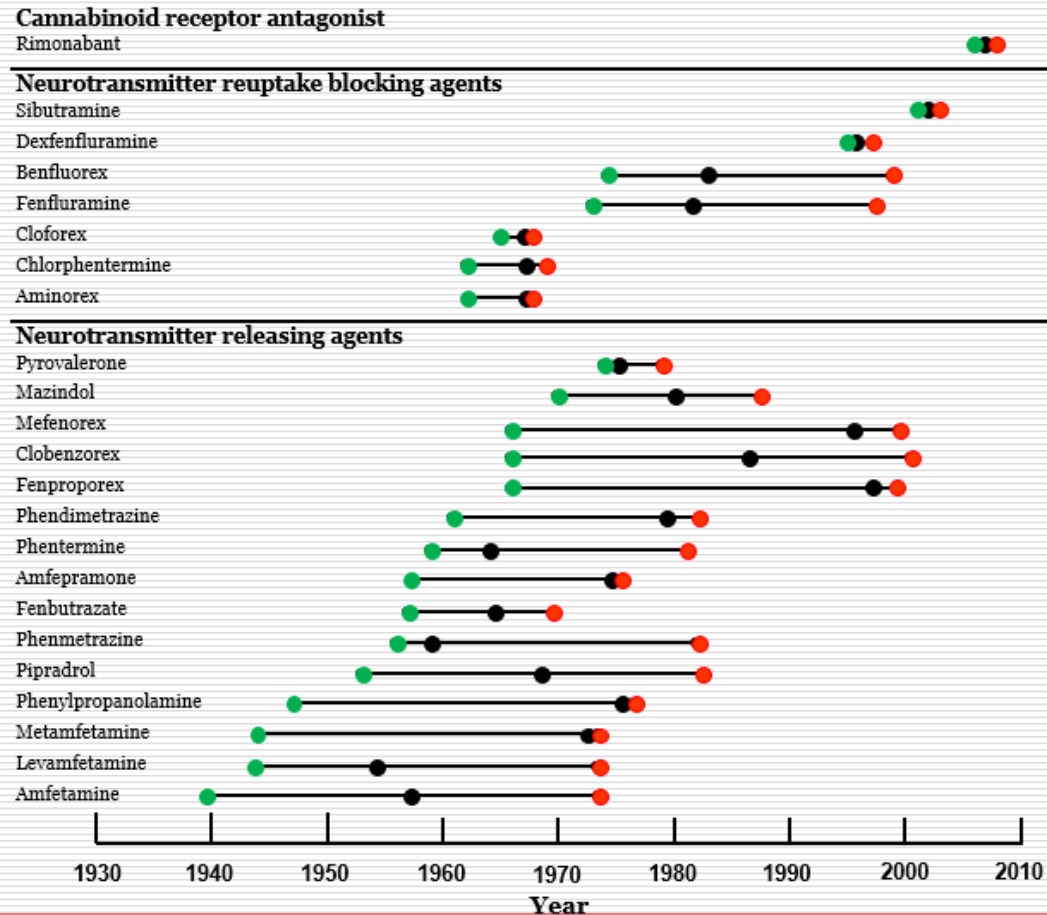


Figure 1. Launch dates (●), dates of first serious adverse drug reactions (ADR) (●), and withdrawal dates (●) of 23 anti-obesity drugs

Fármacos anti-obesidade

Classificação	Major action	Sub-category	On-label drugs	Off-label drugs
Caloric intake reduction	Central nervous system	psychotropic appetite suppressant	Diethylpropion Lorcaserin Mazindol Phendimetrazine Phentermine Phentermine Topiramate(combination Qsymia) +	Methylphenidate
		non-psychotropic appetite suppressant		Beta-histidine Fluoxetine Venlafaxine
		Impulse and craving suppressant	Naltrexone + Bupropion(combination Mysimba)	Bupropion Naltrexone Topiramate
	Gastrointestinal tract	Lipase inhibitor	Orlistat Xenical	
Thermogenesis	Sympathetic nerve stimulant			Ephedrine + Caffeine
Endocrine regulation			Liraglutide Saxenda	Metformin

□ **INDICAÇÕES PARA COLACAÇÃO DE BALÃO INTRA-GÁSTRICO (Sp- Br)**

1. Doentes com obesidade de grau II em que a terapia médica falhou ou necessita de suplementação.
2. Doentes com obesidade mórbida quando a cirurgia é rejeitada, é contraindicado, ou implica risco excessivo.
3. Doentes com superobesidade que precisam perder peso antes da cirurgia bariátrica para reduzir a morbimortalidade relacionada à cirurgia.

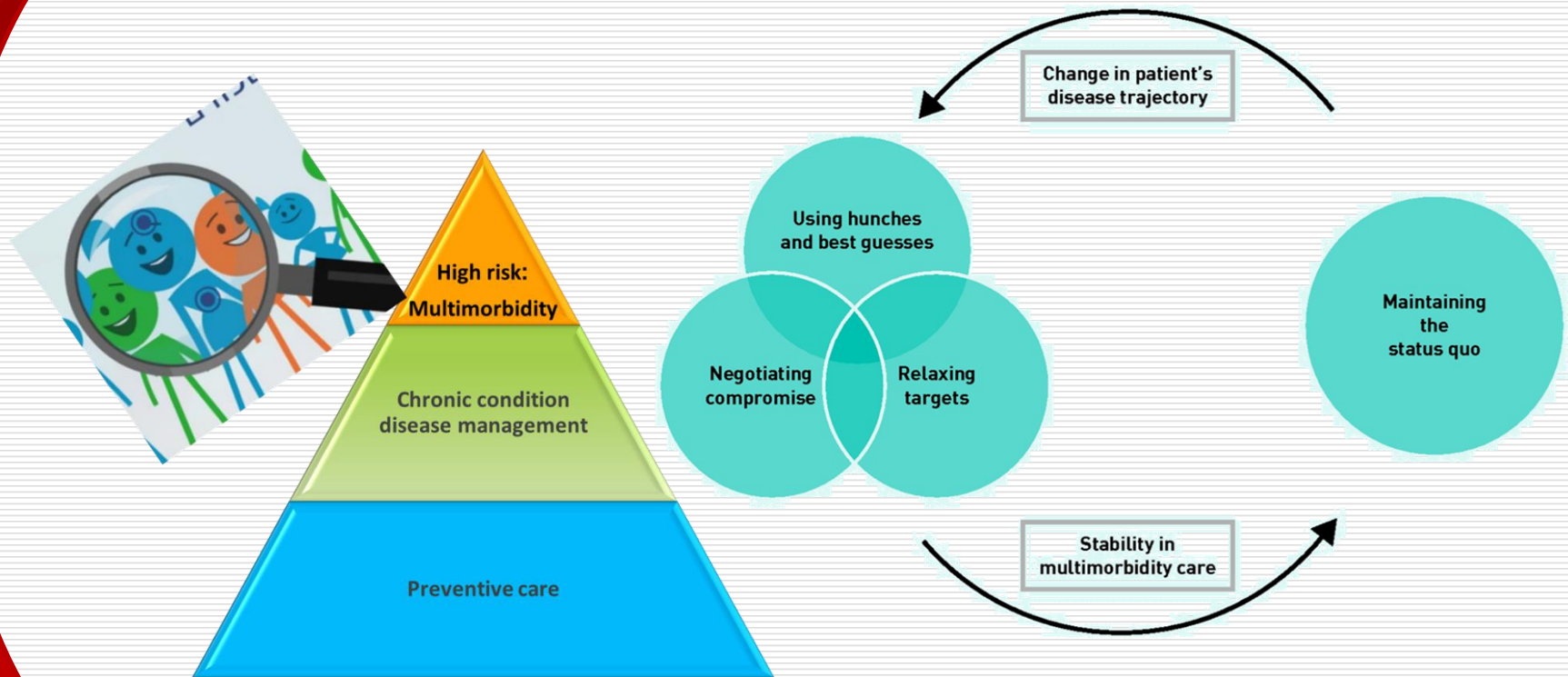
□ **CRITERIOS PARA CIRURGIA BARIATRICA- NOC2012**

- i. índice de massa corporal (IMC) ≥ 40 Kg/m² (obesidade grau 3), com ou sem comorbilidades ou;
 - ii. IMC ≥ 35 Kg/m² (obesidade grau 2) com presença de, pelo menos, uma das seguintes comorbilidades:
 - (i) diabetes mellitus tipo 2;
 - (ii) dislipidemia;
 - (iii) síndrome de apneia obstrutiva do sono;
 - (iv) síndrome de hipoventilação do obeso;
 - (v) hipertensão arterial (especialmente se de difícil controlo);
 - (vi) patologia degenerativa osteoarticular, com marcada limitação funcional.
 - iii. idade entre os 18 e os 65 anos, inclusive;
 - iv. insucesso das medidas não-cirúrgicas na redução ponderal, durante, pelo menos, um ano;
 - v. obesidade que não seja secundária a doença endócrina clássica;
 - vi. capacidade para compreender o procedimento cirúrgico e para aderir a um pro-grama de seguimento a longo prazo;
 - vii. ausência de distúrbios psiquiátricos;
 - viii. ausência de dependência de álcool ou estupefacientes;
 - ix. **relação risco operatório e o risco clínico.**
-

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Multipatologias

NICE GUIDELINES



Cuidados Integrados

Cuidados Integrados



Comprehensive Assessment

Integrated Physician-Nurse Care Plan

Patient-Centered Action Plan

Self-Management Support & Integration

Proactive Follow-up



Assessment of psychosocial risk factors

Recommendations	Class	Level
Psychosocial risk factor assessment, using clinical interview or standardized questionnaires, should be considered to identify possible barriers to lifestyle change or adherence to medication in individuals at high CVD risk or with established CVD.	IIa	B

Core question for the assessment of psychosocial risk factors in clinical practice

Low socio-economic status	<ul style="list-style-type: none"> • What is your highest educational degree? • Are you a manual worker?
Work and family stress	<ul style="list-style-type: none"> • Do you lack control over how to meet the demands at work? • Is your reward inappropriate for your effort? • Do you have serious problems with your spouse?
Social isolation	<ul style="list-style-type: none"> • Are you living alone? • Do you lack a close confidant? • Have you lost an important relative or friend over the last year?
Depression	<ul style="list-style-type: none"> • Do you feel down, depressed and hopeless? • Have you lost interest and pleasure in life?
Anxiety	<ul style="list-style-type: none"> • Do you suddenly feel fear or panic? • Are you frequently unable to stop or control worrying?
Hostility	<ul style="list-style-type: none"> • Do you frequently feel angry over little things? • Do you often feel annoyed about other people's habits?
Type D personality	<ul style="list-style-type: none"> • In general, do you often feel anxious, irritable, or depressed? • Do you avoid sharing your thoughts and feelings with other people?
Post-traumatic stress disorder	<ul style="list-style-type: none"> • Have you been exposed to a traumatic event? • Do you suffer from nightmares or intrusive thoughts?
Other mental disorders	<ul style="list-style-type: none"> • Do you suffer from any other mental disorder?

Risk factor goals and target levels

Smoking	No exposure to tobacco in any form.
Diet	Low in saturated fat with a focus on wholegrain products, vegetables, fruit and fish.
Physical activity	At least 150 minutes a week of moderate aerobic PA (30 minutes for 5 days/week) or 75 minutes a week of vigorous aerobic PA (15 minutes for 5 days/week) or a combination thereof.
Body weight	BMI 20–25 kg/m ² . Waist circumference <94 cm (men) and or <80 cm (women).
Blood pressure	<140/90 mmHg. ^a
Lipid LDL ^b is the primary target	Very high-risk: <1.8 mmol/L (<70 mg/dL) , or a reduction of at least 50% if the baseline is between 1.8 and 3.5 mmol/L (70 and 135 mg/dL). ^d High-risk: <2.6 mmol/L (<100 mg/dL) or a reduction of at least 50% if the baseline is between 2.6 and 5.2 mmol/L (100 and 200 mg/dL). Low to moderate risk: <3.0 mmol/L (115 mg/dL).
Non-HDL-C ^b	<2.6, <3.3 and <3.8 mmol/L (<100, <130 and <145 mg/dL) are recommended for very high, high and low to moderate risk subjects, respectively
HDL-C	No target but >1.0 mmol/L (>40 mg/dL) in men and >1.2 mmol/L (>45 mg/dL) in women indicate lower risk.
Triglycerides	No target but <1.7 mmol/L (<150 mg/dL) indicates lower risk and higher levels indicate a need to look for other risk factors.
Diabetes	HbA1c: <7% (<53 mmol/L).

- The target can be higher in frail elderly patients, or lower in most patients with DM and in some (very) high risk patients without DM who can tolerate multiple blood pressure lowering drugs
- A view was expressed that primary care physicians might prefer a single general LDL-C goal of 2.6 mmol/L.
- Non-HDL-C is a reasonable and practical alternative target because it does not require fasting.
- This is the general recommendation for those at very high risk. It should be noted that the evidence for patients with chronic kidney disease is less strong

Facilitating changes in behaviour

Recommendations	Class	Level
Established cognitive-behavioural strategies (e.g. motivational interviewing) to facilitate lifestyle change are recommended.	I	A
Involvement of multidisciplinary healthcare professionals (e.g. nurses, dieticians, psychologists) is recommended.	I	A
In individuals at very high CVD risk, multimodal interventions integrating medical resources with education on healthy lifestyle, physical activity, stress management and counselling on psychosocial risk factors, are recommended.	I	A

Principles of effective communication to facilitate behavioural change

- Spend enough time with the individual to create a therapeutic relationship – even a few more minutes can make a difference.
- Acknowledge the individual's personal view of his/her disease and contributing factors.
- Encourage expression of worries and anxieties, concerns and self-evaluation of motivation for behaviour change and chances of success.
- Speak to the individual in his/her own language and be supportive of every improvement in lifestyle.
- Ask questions to check that the individual has understood the advice and has any support he or she requires to follow it.
- Acknowledge that changing life-long habits can be difficult and that sustained gradual change is often more permanent than a rapid change.
- Accept that individuals may need support for a long time and that repeated efforts to encourage and maintain lifestyle change may be necessary in many individuals.
- Make sure that all health professionals involved provide consistent information.

Ten strategic steps to facilitate behaviour change

1. Develop a therapeutic alliance.
2. Counsel all individuals at risk of or with manifest cardiovascular disease.
3. Assist individuals to understand the relationship between their behaviour and health.
4. Help individuals assess the barriers to behaviour change.
5. Gain commitments from individuals to own their behaviour change.
6. Involve individuals in identifying and selecting the risk factors to change.
7. Use a combination of strategies including reinforcement of the individual's capacity for change.
8. Design a lifestyle-modification plan.
9. Involve other healthcare staff whenever possible.
10. Monitor progress through follow-up contact.

Psychosocial factors

Recommendations	Class	Level
Multimodal behavioural interventions, integrating health education, physical exercise and psychological therapy, for psychosocial risk factors and coping with illness are recommended in patients with established CVD and psychosocial symptoms in order to improve psychosocial health.	I	A
Referral for psychotherapy, medication or collaborative care should be considered in the case of clinically significant symptoms of depression, anxiety or hostility.	IIa	A
Treatment of psychosocial risk factors with the aim of preventing CAD should be considered when the risk factor itself is a diagnosable disorder (e.g. depression) or when the factor worsens classical risk factors.	IIa	B

Physical activity

Recommendations	Class	Level
It is recommended for healthy adults of all ages to perform at least 150 minutes a week of moderate intensity or 75 minutes a week of vigorous intensity aerobic PA or an equivalent combination thereof.	I	A
For additional benefits in healthy adults, a gradual increase in aerobic PA to 300 minutes a week of moderate intensity, or 150 minutes a week of vigorous intensity aerobic PA, or an equivalent combination thereof is recommended.	I	A
Regular assessment and counselling on PA is recommended to promote the engagement and, if necessary, to support an increase in PA volume over time.	I	B
PA is recommended in low-risk individuals without further assessment.	I	C
Multiple sessions of PA should be considered, each lasting ≥ 10 minutes and evenly spread throughout the week, i.e. on 4–5 days a week and preferably every day of the week.	IIa	B
Clinical evaluation, including exercise testing, should be considered for sedentary people with CV risk factors who intend to engage in vigorous PAs or sports.	IIa	C

Classification of physical activity intensity and examples of absolute and relative intensity levels

Absolute intensity			Relative intensity		
Intensity	MET	Examples	%HR max	RPE (Borg scale score)	Talk Test
Light	1.1-2.9	Walking <4.7 km/h, light household work.	50-63	10-11	
Moderate	3-5.9	Walking briskly (4.8–6.5 km/h), slow cycling (15 km/h), painting/decorating, vacuuming, gardening (mowing lawn), golf (pulling clubs in trolley), tennis (doubles), ballroom dancing, water aerobics.	64-76	12-13	Breathing is faster but compatible with speaking full sentences.
Vigorous	≥6	Race-walking, jogging or running, bicycling >15 km/h, heavy gardening (continuous digging or hoeing), swimming laps, tennis (single).	77-93	14-16	Breathing very hard, incompatible with carrying on a conversation comfortably.

Smoking intervention strategies

Recommendations	Class	Level
It is recommended to identify smokers and provide repeated advice on stopping with offers to help, by the use of follow up support, nicotine replacement therapies, varenicline, and bupropion individually or in combination.	I	A
It is recommended to stop all smoking of tobacco or herbal products, as this is strongly and independently causal of CVD.	I	B
It is recommended to avoid passive smoking.	I	B

The « Five As » for a smoking cessation strategy for routine practice

A-ASK:	Systematically inquire about smoking status at every opportunity.
A-ADVISE:	Unequivocally urge all smokers to quit.
A-ASSESS:	Determine the person's degree of addiction and readiness to quit.
A-ASSIST:	Agree on a smoking cessation strategy, including setting a quit date, behavioural counselling, and pharmacological support.
A-ARRANGE:	Arrange a schedule of follow-up.

ELETRONIC CIGARRETTES?

Brady, Benjamin R., et al. "**Electronic Cigarette Policy Recommendations: A Scoping Review.**" *American journal of health behavior* 43.1 (2019): 88-104.

Identificaram 5 tipos de recomendação:

- 1. incentivar o uso de e-cigarros como uma ajuda de cessação ou como uma fonte alternativa de nicotina (N = 5);**
- 2. apoiar indivíduos que usam e-cigarros para deixar de fumar (N = 20);**
- 3. evitar usar até que mais pesquisas estejam disponíveis (N = 19);**
- 4. restringir o acesso com base nas evidências disponíveis (N = 30);**
- 5. proibir o marketing e venda de cigarros eletrônicos (N = 7)**



Nutrition

Recommendations	Class	Level
A healthy diet is recommended as a cornerstone of CVD prevention in all individuals.	I	B

Healthy diet characteristics

- Saturated fatty acids to account for <10% of total energy intake, through replacement by polyunsaturated fatty acids.
- Trans unsaturated fatty acids: as little as possible, preferably no intake from processed food, and <1% of total energy intake from natural origin.
- <5 g of salt per day.
- 30–45 g of fibre per day, preferably from wholegrain products.
- ≥200 g of fruit per day (2–3 servings).
- ≥200 g of vegetables per day (2–3 servings).
- Fish 1–2 times per week, one of which to be oily fish.
- 30 grams unsalted nuts per day.
- Consumption of alcoholic beverages should be limited to 2 glasses per day (20 g/d of alcohol) for men and 1 glass per day (10 g/d of alcohol) for women.
- Sugar-sweetened soft drinks and alcoholic beverages consumption must be discouraged.

Body weight

Recommendations	Class	Level
It is recommended that subjects with healthy weight maintain their weight. It is recommended that overweight and obese people achieve a healthy weight (or aim for a reduction in weight) in order to reduce BP, dyslipidaemia and risk of developing type 2 DM, and thus improve the CV risk profile.	I	A

H, 51 anos, programador informático

Multipatologias

Obeso grau III, comorbilidades, ICC
Programa alimentar adaptado/Balão
Cirurgia Bariátrica
Atividade física/Reabilitação cardíaca
Outras Questões?

Cuidados Integrados
