Algorithm of **obesity** in individuals older than **65 years**

1

Evaluate functional status, sarcopenia, and cognitive status

FRAILTY
(FRAIL scale)

Questions

Fatigue: "Did you feel tired all or most of the time during the past 4 weeks?" a

Resistance: Do you have any difficulty walking up 10 steps without resting?" a, b

Ambulation: Do you have any difficulty walking several hundred yards?" a, b

Illnesses: "Did a doctor ever tell you that you have >5 among these 11 illnesses?" a, c

Loss of weight: "Have you lost >5% of your weight in the last year?" a

Answers
a 1 = Yes, 0 = No.
b By yourself and not using aids.
c Hypertension, diabetes, cancer (other than a minor skin cancer), chronic lung disease, heart attack, congestive heart failure, angina, asthma, arthritis, stroke, kidney disease.

SARCOPENIA
(SARC-F scale)

STRENGTH
How much difficulty do you have in lifting and carrying 4.5 kg?
4.5 kg is about the weight of a house cat or 3 1.5-liter bottles of mineral water

| 0 None | 1 Some | 2 A lot or unable |

RISE FROM A CHAIR
How much difficulty do you have transferring from a chair or bed?

| 0 None | 1 Some | 2 A lot or unable |

ASSISTANCE IN WALKING
How much difficulty do you have walking across the room?

| 0 None | 1 Some | 2 A lot or unable |

CLIMB STAIRS
How much difficulty do you have climbing a flight of 10 stairs?

| 0 None | 1 Some | 2 A lot or unable |

FALLS
How many times have you fallen in the past year?

| 0 None | 1 1-3 falls | 2 4 or more falls |

≥4 = Sarcopenia

COGNITIVE IMPAIRMENT
(PFEIFFER test)

Question

1 What is today's date? (dd/mm/yy)
2 What day of the week is it today?
3 What is the name of this place or building?
4 What is your telephone number? If you do not have a telephone: what is your address?
5 How old are you?
6 What is your date of birth? (dd/mm/yy)
7 What's the current president's name?
8 What's the name of the previous president?
9 What is your mother's surname?
10 Can you count backward from 20 by 3's?

TOTAL NUMBER OF ERRORS

TOTAL No. OF ERRORS
0 to 2 errors = **Normal.**
3 to 4 errors = **Mild cognitive impairment.**
5 to 7 errors = **Moderate cognitive impairment**
8 to 10 errors = **Severe cognitive impairment.**

2

REDUCED

Intensify non-pharmacological interventions and maintain quality of life
(avoid restrictive diets in this patient profile)

Mediterranean diet

Healthy lifestyle
- Healthy eating **habits.**
- Adapted **physical exercise.**
- Do **not smoke.**
- Practice **healthy sleep habits.**

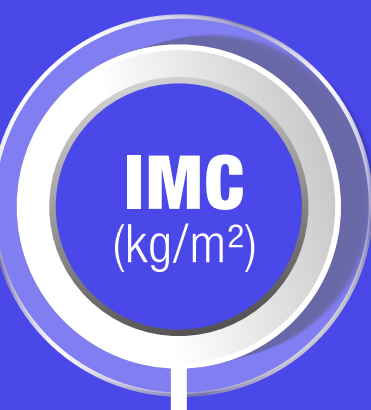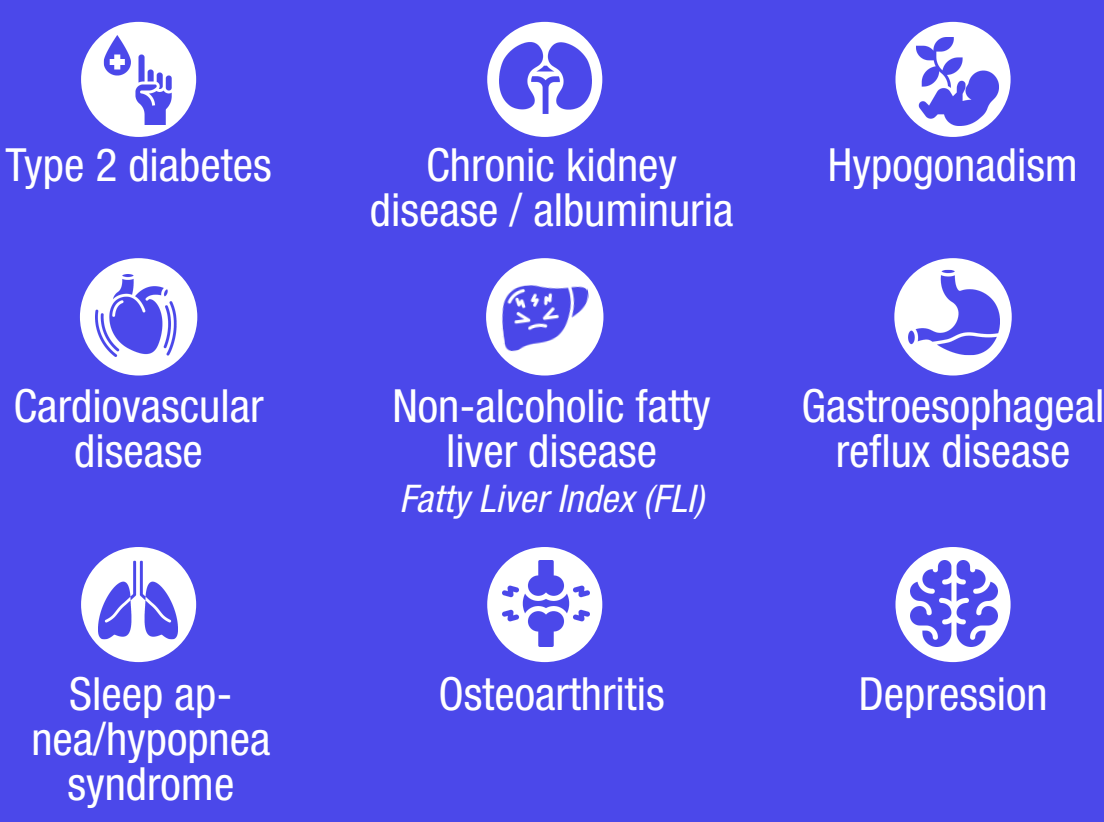- **Calories:** adjust calories intake to maintain a healthy weight.
- Unsaturated **fats.**
- **Virgin olive** oil as the main fat.
- Maintain plasma **vitamin D** level >30 ng/ml.
- Soluble **fiber.**

CONSERVED

COMORBIDITIES

1

- Type 2 diabetes
- Chronic kidney disease / albuminuria
- Hypogonadism
- Cardiovascular disease
- Non-alcoholic fatty liver disease *Fatty Liver Index (FLI)*
- Gastroesophageal reflux disease
- Sleep apnea/hypopnea syndrome
- Osteoarthritis
- Depression

2

Edmonton Obesity Staging System (EOSS)

Stage	Cardiometabolic factors	Psychological/functional factors
0	No risk factors.	No functional impairment or impairment of well-being.
1	Subclinical risk factors: prediabetes, metabolic syndrome, non-alcoholic fatty liver disease.	Mild limitations and/or impairment of well-being (for example dyspnea on moderate exertion, occasional aches and pains, fatigue).
2	Established organ disease: type 2 diabetes, hypertension, sleep apnea.	Moderate limitations and moderate impairment of well-being.
3	Advanced-stage cardiovascular disease: myocardial infarction, stroke).	Significant limitations and/or significant impairment of well-being.
4	Severe dysfunction such as advanced-stage diabetes.	Severe limitations and/or impairment of well-being.

3

IMC (kg/m²)

30-34.9

Healthy lifestyle
- Healthy eating **habits.**
- Adapted **physical exercise.**
- Do **not smoke.**
- Practice **healthy sleep habits.**

35-39.9

If there are comorbidities and/or EOSS >2
Drugs *
- **Liraglutide 3.0** (SC 3 mg/24 h).
- **Semaglutide 2.4 mg** (sc one time each week). **
- **Tirzepatide 5/10/15 mg** (sc one time each week). **
- Orlistat (oral 60-120 mg/8 h).

>40

Drugs *
- **Liraglutide 3.0** (SC 3 mg/24 h).
- **Semaglutide 2.4 mg** (sc one time each week). **
- **Tirzepatide 5/10/15 mg** (sc one time each week). **
- Orlistat (oral 60-120 mg/8 h).
Bariatric surgery: Evaluate individually in select cases.

Evaluate withdrawing obesogenic drugs: Glucocorticoids, Antipsychotics, Antidepressants, Anticonvulsants, Antimanic agents, non-cardioselective beta-blockers, Antimigraine agents, Antihistamines, Antidiabetics: sulfonylureas, glinides thiazolidinediones, insulin.
*   The recommendation of GLP1 agonists is the first choice due to their efficacy. Re-evaluate in 12 weeks and suspend if 5% of weight is not lost.
**   When available.