Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive

First Line Identification & Management of Malnutrition Workshop

Dr. Sharon Kennelly Clinical Specialist Dietitian
Yvonne Ryan Senior Community Dietitian

Workshop Outline

Before Coffee (10.00am-11.30am)

- Introduction -Dr. AL Story & Dr. Kieran Harkin (20mins)
- Why does malnutrition matter why should we try to detect and treat it ? Sharon Kennelly (20 mins)
- The Hospital & Community Dietitian Perspective on the challenges of treating malnutrition in the homeless population ? -Yyonne Ryan (20 mins)
- Practical session learn to do the MUST including MUAC a measurement that takes less than 1 min and helps to detect malnutrition (15mins)
- (Above timed for 1 hr and 15 mins (15mins contingency)
-

After coffee break (11.45 am- 1.00pm)

- Dietary advice-what tips can a non-dietitan give to a patient at risk of malnutrition (10 mins)
- Appropriate prescribing of ONS -What is the HSE guidance ? (30mins)
- Discussion Time /Questions (35 mins)

What is Malnutrition?

- A useful definition is:

- **Malnutrition : ‘a state resulting from a lack of intake or uptake of nutrition that leads to altered body composition ……..leading to diminished physical and mental function and impaired clinical outcome from disease’**

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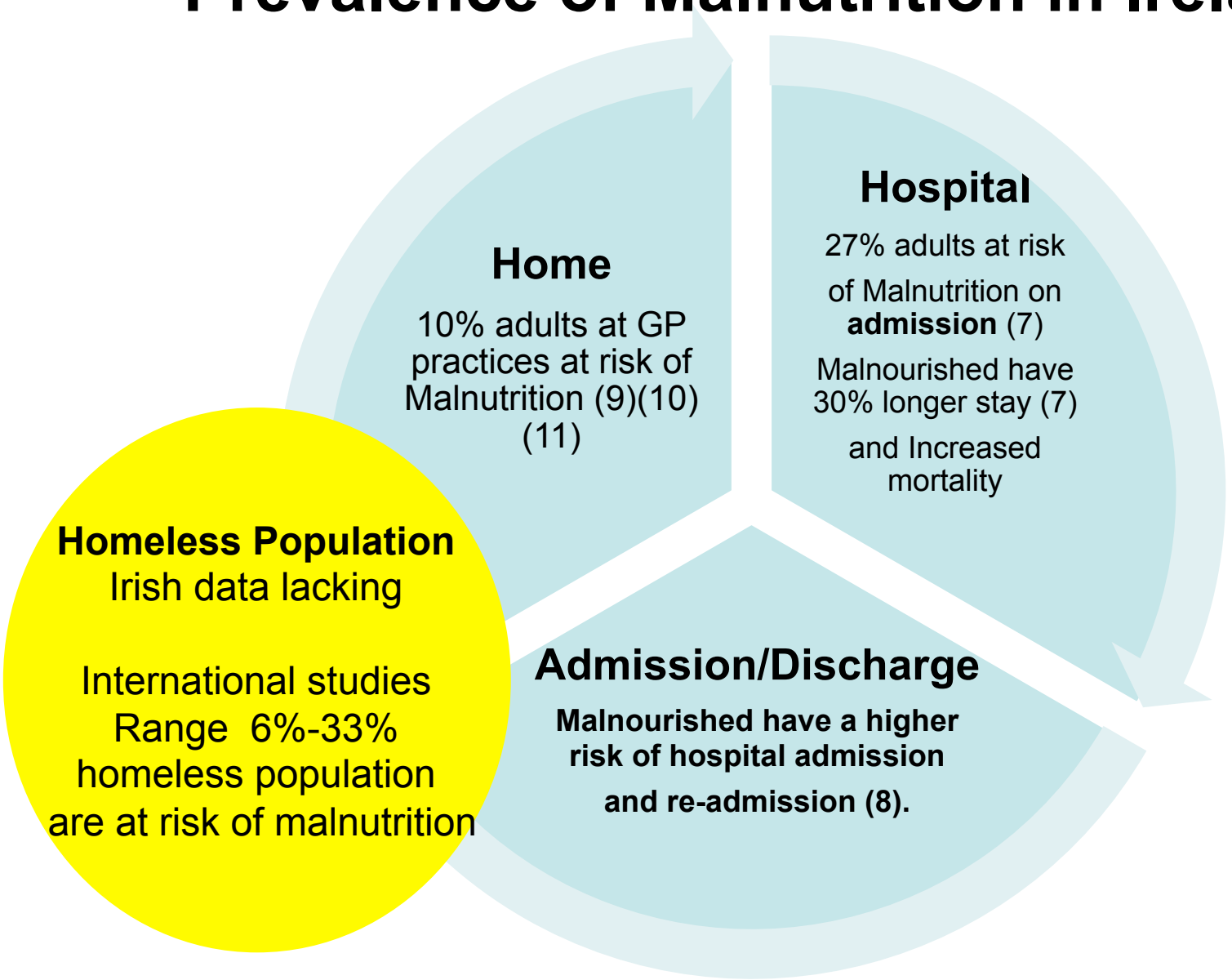
Prevalence of Malnutrition in Ireland



Malnutrition the adverse clinical effects and impact on health service resources ?

Consequences to the Health Service -increased healthcare utilisation

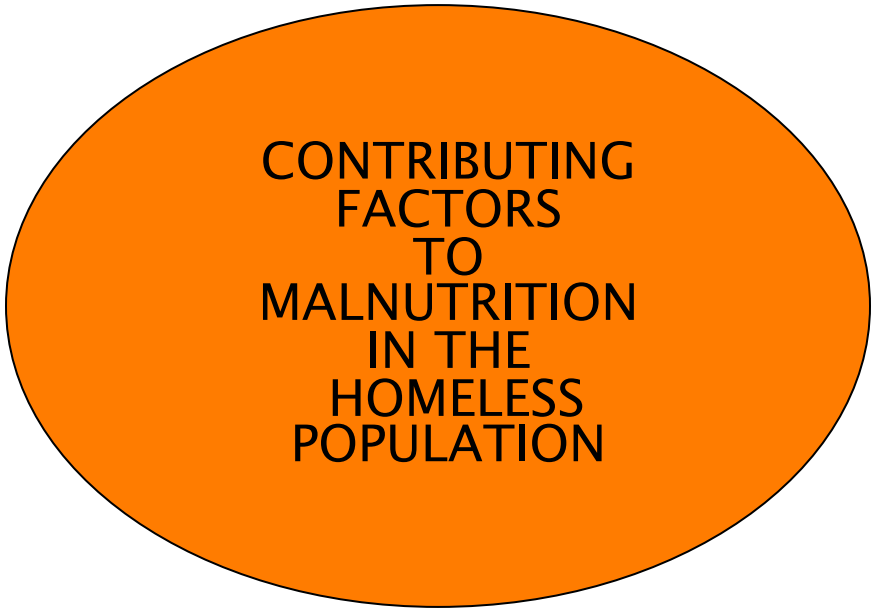
Estimated annual cost €1.4 Billion

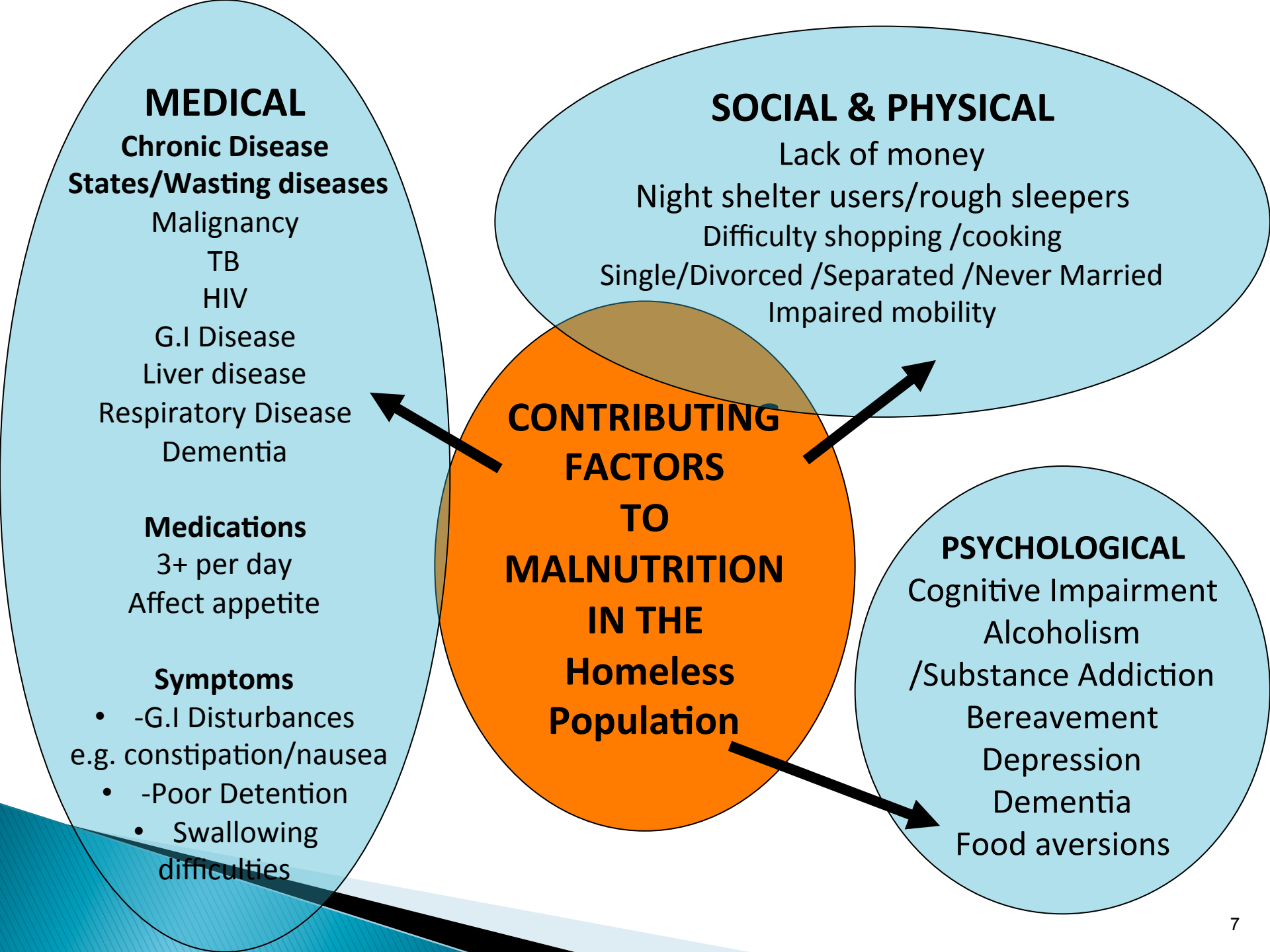
Effects to the individual
Loss of lean and non-lean body tissue has systemic effects and negatively affects clinical outcomes

Irish data €5357 cost per malnourished patient per year

(Rice, Normand 2012)

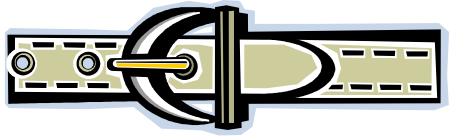
Underlying factors contributing to malnutrition




MEDICAL
Chronic Disease States/Wasting diseases
Malignancy
TB
HIV
G.I Disease
Liver disease
Respiratory Disease
Dementia
Medications
3+ per day
Affect appetite
Symptoms
-G.I Disturbances e.g. constipation/nausea
-Poor Detention
Swallowing difficulties
SOCIAL & PHYSICAL
Lack of money
Night shelter users/rough sleepers
Difficulty shopping /cooking
Single/Divorced /Separated /Never Married
Impaired mobility
CONTRIBUTING FACTORS TO MALNUTRITION IN THE Homeless Population
PSYCHOLOGICAL
Cognitive Impairment
Alcoholism /Substance Addiction
Bereavement
Depression
Dementia
Food aversions

Signs and Symptoms related to possible risk of malnutrition-what to look out for ?

- VISUAL
  - Clothes or jewellery lose not fitting properly ,belt notch change
  - Obvious thin/Wasted appearance



- MOBILITY
  - History of decreased activity, decreased ADL score
- CHANGE IN EATING BEHAVIOUR
  - History of decreased intake/poor appetite, portion sizes changed
  - Reported Altered taste/smell
  - Change in food preferences avoiding food e.g. meat
  - Poor appetite/disinterest in food reported
- GI DISTURBANCES-SMALL APPETITE :
  - Nausea, early satiety, diarrhoea, constipation , dry mouth, lack of appetite difficulty swallowing

Identification of Malnutrition Risk

- Gold standard method for identification of Malnutrition is use of a validated Malnutrition screening tool

Equipment for Malnutrition Screening

- **WEIGHT**
  - Medically approved weighing equipment:
    - Stand-on scales
    - Chair scales
    - Hoist or bed weighing scales

- **HEIGHT**
  - Stadiometer (height measure)
  - Measuring tape (for ulna length, knee height or mid-upper arm circumference)

The introduction of screening for Malnutrition needs to be supported with appropriate staff training and access to the necessary equipment

But I have less than 1 minute and no equipment !

- Consider the Mid Upper Arm circumference (MUAC)– Alternative Measure
- All you Need a measuring tape and a pen
- **Cut-offs**
  - **< 23.5cm indicates underweight for adults** ('MUST' –BAPEN 2003)
- This measure is sensitive to weight change i.e. if it reduces weight is reducing and vice versa (12)

How to

Video clip :https://www.youtube.com/watch?v=x-YrCiyd9Mk

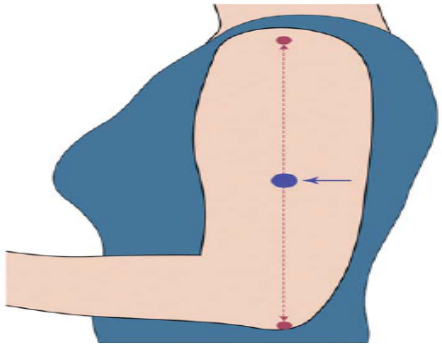


Figure 3. Showing point of MUAC.

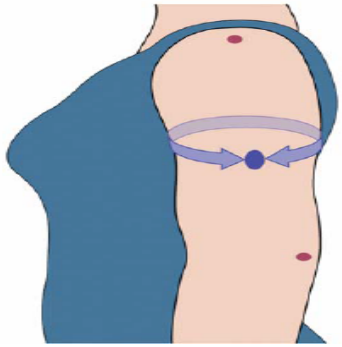


Figure 4. Circumferential measurement of MUAC.

Difference between Malnutrition Screening & Nutritional Assessment

- **Malnutrition Screening**
  - **Is the first step that all health care professionals** can perform to identify patients who may be at risk of Malnutrition and who may benefit from appropriate nutrition intervention led by a registered Dietitian .

- **Nutritional Assessment**
  - **Can only be performed by a Registered Dietitian.**

  Ideally all patients identified as being at risk by screening should be referred to a Registered Dietitian (**or follow steps as per local policy**).

Referral to a Dietitian

- **Is this realistic for this population group ?**
  - **Likelihood of attendance ?**

Examples of appropriate referrals

- Patients at risk of Malnutrition
- Patient who require complex nutritional care e.g. poorly controlled diabetes, renal impairment, coeliac disease, tube feeding etc.
- Assessment of on-going ONS prescription

- Contact details for Community Dietitian Managers in all CHOs see www.hse.ie/nutritionsupports

Nutrition Assessment after screening and can only be carried by a registered dietitian

Source BDA 2017

…istered Dietitian collects …formation

…sts

…nts;

Where is the best setting to provide access to a clinical dietetic service ?

Is it at the 'Step Up'/ Step Down' Facility

What do you think ??

The Dietitian then makes a nutrition diagnosis , selects an appropriate intervention and monitors a care plan.

Resources for healthcare professionals and families & carers

www.hse.ie/nutritionsupports

Hospital and Community Dietitian Perspective

By

Yvonne Ryan, Senior Community Dietitian, Community Healthcare Dublin South, Kildare & West Wicklow.

yvonne.ryan@hse.ie

And

Elaine Leahy, Senior Dietitian, St. James's Hospital.

elleahy@stjames.ie

Challenges in providing a Dietetic Service to an Adult Homeless Population

1. Service Provision Challenges

- Frequently self-discharge from acute services.

- Community Dietitian referrals generally from Acute Dietitian or patient's GP
  - Typically discharged into the catchment area as staying with relative or friend.
  - Patient may have moved on before receive an appointment.
- Detailed referral information required including medical history, relevant biochemistry & medications. Link with GP for missing information – may not be well known by their GP.
- High rate of non-attendance – for both initial and review appointments.

Challenges in providing a Dietetic Service to an Adult Homeless Population

2. Patient Factor Challenges

- Poor concentration & poor capacity to retain information
- Low literacy levels
- Mental health issues – low mood, ++stress
- Complex medical history
- Poor dentition
- Requesting prescription for ‘Ensures’
- Avoid food provision centres due to ‘dealers’ being present
- Reliance on Outreach teams for food

Challenges in providing a Dietetic Service to an Adult Homeless Population

3. Nutritional Assessment Challenges

- Difficulty assessing 'usual' dietary intake – no 'typical' day
  - no regular pattern of eating
  - chaotic lifestyle
- Addictions take priority over food and eating
- Limited choice regarding food if living in temporary accommodation
- Difficult to implement high protein high calorie and food fortification advice
- Lack of storage for food & ONS
- Misperceptions about the cost of eating well
- Lack access to cooking facilities and basic cooking skills
- Excess calories from alcohol may mask the extent of undernutrition
- Need for multi-vitamin and mineral supplement
- Risk of Refeeding Syndrome

Refeeding Syndrome (IrSPEN Guideline Document No. 1, Nov. 2013)

- Refers to serious metabolic disturbances that can occur in starved or malnourished patients on recommencement of feeding, either enterally or parenterally.
- The main biochemical abnormality is hypophosphataemia. Hypokalaemia, hypomagnaesaemia, hypoglycaemia, sodium and fluid retention and thiamine deficiency may develop.
- Clinical signs of refeeding syndrome include acute cardiac failure, fluid imbalance, delirium, arrhythmias, seizures and sudden death

Refeeding Syndrome

High Risk: 1 or more major risk factors

- BMI < 16kg/m^2
- Unintentional weight loss > 15% over 3-6 months
- Little or no intake for > 10 days
- Low levels of potassium, phosphate or magnesium

Extreme Risk

- BMI < 14kg/m^2
- Little or no intake for > 15 days

High Risk: 2 or more minor risk factors

- BMI < 18.5kg/m^2
- Unintentional weight loss > 10% over 3-6 months
- Little or no intake for > 5 days
- History of alcohol abuse or drugs incl. insulin, diuretics, chemotherapy or antacids

Moderate Risk

- 1 of the first 3 factors above

If Patient identified as *High Risk* recommended action is :

- Check electrolytes
- Slow initiation of feeding/nutrition support according to risk category
- 200-300mg thiamine orally/enterally for 10 days & a multi-vitamin and mineral supplement
- Electrolyte replacement if required and monitor

Case Study - Patient with Decompensated Liver Disease

- 50-year old male, admitted SJH with confusion & falls on a background of alcohol excess - 4th admission in 2 years. Unemployed. Previous IVDU (on methadone).
- Diagnosis: ALD with ascites and encephalopathy.

Nutritional Assessment:

- Weight: 76kgs. Confounded by leg oedema (1kgs) & moderate ascites (6kgs)
  Usual weight: 80kgs (2 years ago)
  Dry weight estimated: 69kgs (BMI: 20kg/m²) - **> 11kgs weight loss in 2 years**
- High nutritional requirements: 2000 - 2700kcals & 80-100g protein per day
- Requiring 1.5L fluid restriction, no added salt diet & diuretics
- Pre admission: substantial calorie intake from alcohol (900calories), irregular meal pattern consisting of foods high in saturated fat, sugar and salt. Meeting 30% energy and 20% protein requirements.
- Likely vitamin and mineral deficiencies
- Poor dentition
- Refeeding Syndrome risk

Hospital Nutritional Care Plan

- Soft, high protein high calorie, no added salt diet with nourishing snacks
- *Gradual* build up to Ensure 2kcal TDS (400kcals, 18g protein, 200mls per bottle) in view of Refeeding Syndrome risk
- Calogen 30mls TDS (405kcals)
- Thiamine 300mgs OD for 10days and multivitamin
- If no improvement in oral intake consider NG feeds

On Review

- Weight 74kgs
- Much less confused and agitated. Appetite improving with reduction in ascites
- Eating small portions at mealtimes, diet low in salt as provided by catering
- Nutritional intake predominantly from nutritional supplements

Dietetic Care Plan for discharge:

- Continue high protein high calorie, no added salt diet
- Discontinue Calogen and continue Ensure 2kcal TDS
- One Ensure 2kcal to be taken before bed
- Referred to Community Dietetics for follow-up

Community Dietitian follow-up

- Referral for 50-year old male for follow-up following discharge from acute services
- On admission, dry weight: 69kgs (BMI: 20kg/m^2). On discharge, 74kgs (BMI: 22.8kg/m^2).

Nutrition Care Plan advised in hospital discharge information

- Healthy Eating for Liver Disease. Nutrition Care Plan – regular meals & snacks, salt restriction, night-time snack providing 50g carbohydrate. Multi-vitamin and mineral supplement.
- Prescribed ONS: Ensure 2kcal TDS
- Aiming for weight maintenance

Community Dietitian follow-up

- Initially contacted by phone, +letter to confirm appointment & 'reminder' phonecall
- 40-minutes late for appointment (Aug. 2017)
- Seemed distracted, drowsy & restless
- Reported Relapse with alcohol after hospital discharge – dry for one week
- Weight: 83.1kgs (BMI: 25.9kgs). Increased 9kgs since discharge (oedema & calories from alcohol)
- GP had stopped ONS prescription
- +Constipation.

Dietary Assessment

- No set pattern – "I eat when I am hungry"
- Generally no breakfast
- Late night eating
- ++snacking throughout day: sausage sandwich, 'toastie', coffee and chocolate bar, curry and chips, ham sandwich, Tayto, ++coffee

Community Dietitian follow-up

- Advised regular meals and snacks
- High protein high calorie advice
- Snack before going to bed
- No ONS recommended
- Follow-up appointment in 2 weeks – DNA'd
- Same patient later re-referred following another hospital admission (Feb. 2018)
- Re-commenced ONS in hospital. Relapse with heroin.
- Weight 74.0kgs (decreased 7.1kgs 6 months ago)
- DNA'd Community Dietitian appointment May 2018.

Conclusion

- Malnutrition is *common, complex and multi-factorial* and contributes to poor health outcomes in this population.
- Patients are difficult to access and hard to engage.
- **Recommend an *integrated, multi-disciplinary approach* to delivering services.**

Healthy Food Made Easy

- Commenced in 1992 as “The Food & Health peer-led nutrition education programme” for low income groups.
- Six sessions to help people develop the skills, knowledge and confidence to eat well and improve their health.
- Delivered in different Community settings by peer-leaders trained and supported by Community Dietitians and a local Food & Health Project co-ordinator.

Healthy Food Made Easy

- Suitable for a wide range of groups – addiction recovery & Merchants Quay.
- Practical, hands-on experience of food preparation.
- Enhance cooking skills and increase confidence in cooking.
- Increase understanding of healthy eating.
- Demonstrate that it is possible to eat healthily on a budget.
- Encourage appropriate changes in eating patterns.
- Support from peers.

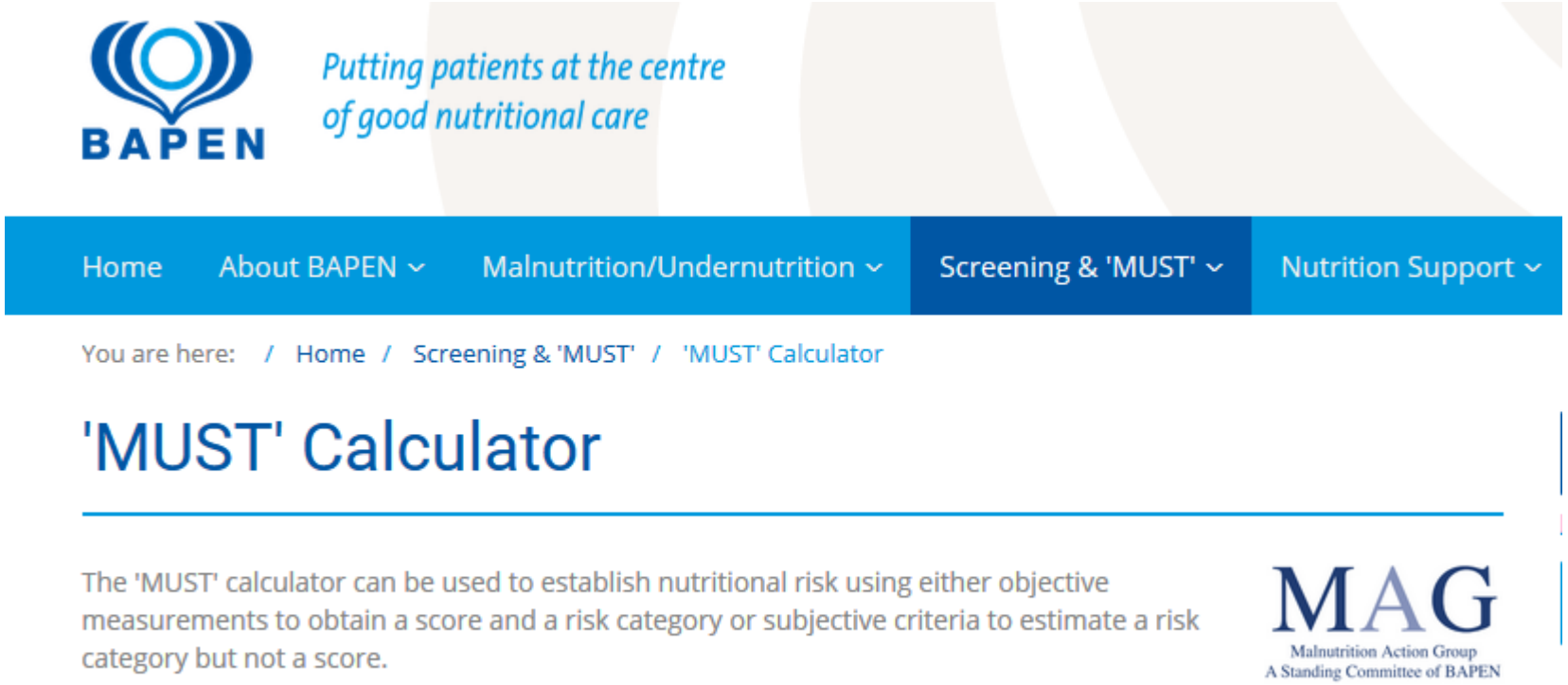
The 'MUST'
Malnutrition Universal Screening Tool

(BAPEN:MAG ,2003)

- 'Tool developed by BAPEN .
- The 'MUST' tool can be used for **initial** assessment or as a **monitoring** tool
- It is designed for use with **adults only**
- **5 steps to follow:**
  - Aim is to **add 3 scores** to get a total risk score and then **follow management guidelines**

Save this link to your phone or desktop !

https://www.bapen.org.uk/screening-and-must/must-calculator



Who is 'MUST' not suitable for ?

- Children and young adults (<18 years)
- Athletes –people with high muscle mass
- Patients with fluid retention/Oedema/ Acities
- Post-amputation
- Pregnancy/Lactation

STEP 1-BMI score

- **Body Mass Index (BMI)** is a weight for height measurement that gives a rapid interpretation of nutritional status.

- Measure the person's **height in metres (m)**
- Measure the persons **weight in kilograms (kg)**

- If calculating it's the weight /(height)^2
- **Use a BMI chart** to determine BMI & the score
- Then record the BMI Score (12)

BMI kg/m^2	Score
>20	= 0
18.5-20	= 1
<18.5	= 2

Step 2- Weight Loss Score

- Weight Loss Score refers to unintentional weight loss in the last 3-6 months
- Unintentional Weight loss is an important clinical sign
- **>5% unintentional weight loss in 3-6 months is considered significant**
- Ask the patient about weight loss , or examine the medical records for previous weight history
- **Previous weight (kg) –Current Weight (kg)= Weight loss (kg)**
- Then use tables to establish weight loss score.

% Unplanned Weight Loss in the past 3-6 months	Score
< 5%	= 0
5-10%	= 1
>10%	= 2

Step 3: Acute Disease Effect Score

If very little or no food intake for the last five days or there is likely to be no intake for the next five days

The Score is always 2

- Apply this score if the patient is affected by an acute patho-physiological or psychological condition

  for Example :Acute pancreatitis

‘MUST’ Online Training Resources

- NEW HSE LanD Online MUST education sessio
- Produced by IRSPEN, The Offices of Nursing and Midwifery Service, and HSE Quality Improvement Directorate HSE
  - Take 35-40 mins to complete
  - Includes education about prevalence and causes of malnutrition and detailed explanation of MUST and case studies.
  - Short multiple choice exam at the end of module
  - Certificate of completion can be down loaded and used for CPD records
  - **All HSE employees and GPs have free access one registered with HSE-lanD accessed at www.hseland.ie**

HSELand Malnutrition Universal Screening Tool ('MUST') Tutorial

Practical Demo and Case Study

- ✓ Basic high protein high calorie dietary advice

  4 page leaflet
  NALA (Low-Literacy friendly) approved
  Available to view or download print for patients from www.hse.ie/nutritionsupports

  Black & white printer friendly

Cookbook–High Protein High Energy Snack Ideas

Beans
on
Toast
250kcals
9g protein

Cheese
on
Crackers
245 kcals
5.5g protein

Scone & Jam
400 kcals
7g protein
Extra egg &
Ground nuts added to recipe

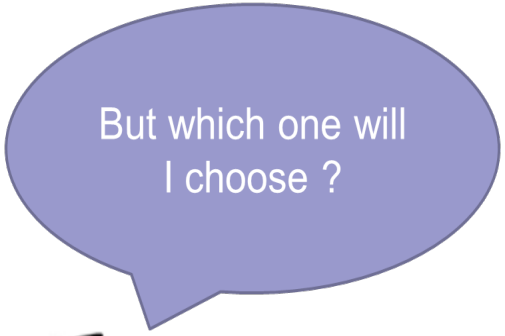
Work to date provided by the Irish Nutrition & Dietetic Institute (INDI)

- Collaboration with Dublin Regional Homeless Executive within Dublin City Council to provide 'easy' recipes for Homeless hubs.
  - This work was done by Megan Rayner a final year UCD Student
  - Used across all of the Hubs in the South Inner City INDi will continue to support.
- Worked with Simon this year to develop and nutritionally analyse for soup recipes suitable for mass production. These soups are now used in Simon Hostels across Ireland.
- Keen to support community initiatives like this in future.
- **Contact info@indi.ie**

ONS street selling

Contributes to a negative view of these products among some

Oral Nutritional Supplements



Standard ONS –facts & figures

- 95,000 individuals prescribed standard ONS* per annum in the community

€27 million per annum total cost

ONS should be targeted at patients who have a clinical indication for their use and discontinued when no longer required

(2017 data Source HSE PCRS)

Clinical benefits of standard ONS

Benefits typically seen with a dosage of 300-900 kcal/day in the community within 2-3 months

Specific benefits include:

- **Weight gain**
- **Significant reduction in mortality:** for 'malnourished' patients
- **Reduced risk of complications:** e.g. post surgery, post hip fracture
- **Improved clinical and functional outcomes:** e.g. decreased infection rates

Important : Typically only patients who are at risk of malnutrition/or malnourished will receive clinical benefits from taking them

Challenges to Oral nutritional Supplement Prescribing & Substance Misuse

- Substance misuse is an area of concern both due to the cost and appropriateness of ONS prescribing and prevalence of malnutrition in this population.

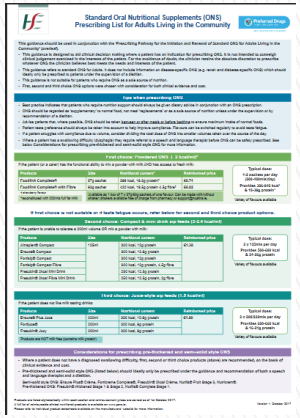
- Substance misusers may have a range of nutrition related problems including:
  - Poor appetite and weight loss
  - Constipation (drug misusers in particular)
  - Nutritionally inadequate diet
  - Dental decay (drug misusers in particular).

Problems can be created by prescribing ONS in substance misusers:

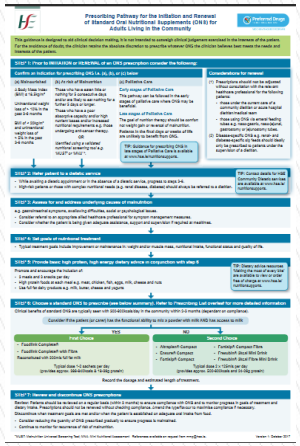
- Once started on ONS it can be difficult to stop prescriptions.
- ONS can be used instead of meals instead of additional to meals and therefore provide no benefit.
- They may be given to others e.g. family/friends.
- They can be sold and used as a source of income.
- It can be hard to monitor nutritional status and assess on-going need for ONS due to poor attendance at appointments.

Appropriate Use of Oral Nutritional Supplements –New guidance for Community 2018

- New national HSE guidance on Oral nutritional supplements (ONS) published Dec 2017.
- Available at
- www.hse.ie/nutritionsupports
- Communication from HSE Primary Care & Medicines Management Programme sent to all GPs Jan 2018



Prescribing Pathway for the Initiation and Renewal of Standard Oral Nutritional Supplements (ONS) for Adults Living in the Community



Standard Oral Nutritional Supplements (ONS) Prescribing List for Adults Living in the Community

What HSE guidance is available to prescribers ?

- Step 1 : Prescribers have been advised to identify risk malnutrition using either NICE criteria (2006) or a validated nutrition screening tool ?
- Step 2: All patients identified at risk of malnutrition should ideally be referred the dietitian for a nutrition assessment
- Step 3: Underlying factors, such as gastro-intestinal symptoms and swallowing symptoms should be addressed where possible
- Step 4 : Set Goals
- Step 5 : Basic dietary advice should be provided by the prescriber using resources at www.hse.ie/nutritionsupports
- Step 6:ONS options from the standard prescribing list should be considered
- Step 7 : Review and discontinue. Patient prescribed ONS should be reviewed regularly by the prescriber.

What are the criteria for consideration of initiation of ONS ? While awaiting or in the absence of a dietetic service

- Patients found to be 'at risk' 'of malnutrition using a y tool

OR

- A BMI of ≤ 18.5kg/m²

OR

- Unintentional weight loss of >1 hy BMI level)

OR

- A BMI of ≤ 20 kg/m² a % in the past 3-6 months

OR

- Those who hav ys or are likely to eat nothing for the next 5 d

OR

- Or tho asing poor absorption, high nutrient losses or incr ember the underlying factors)

OR

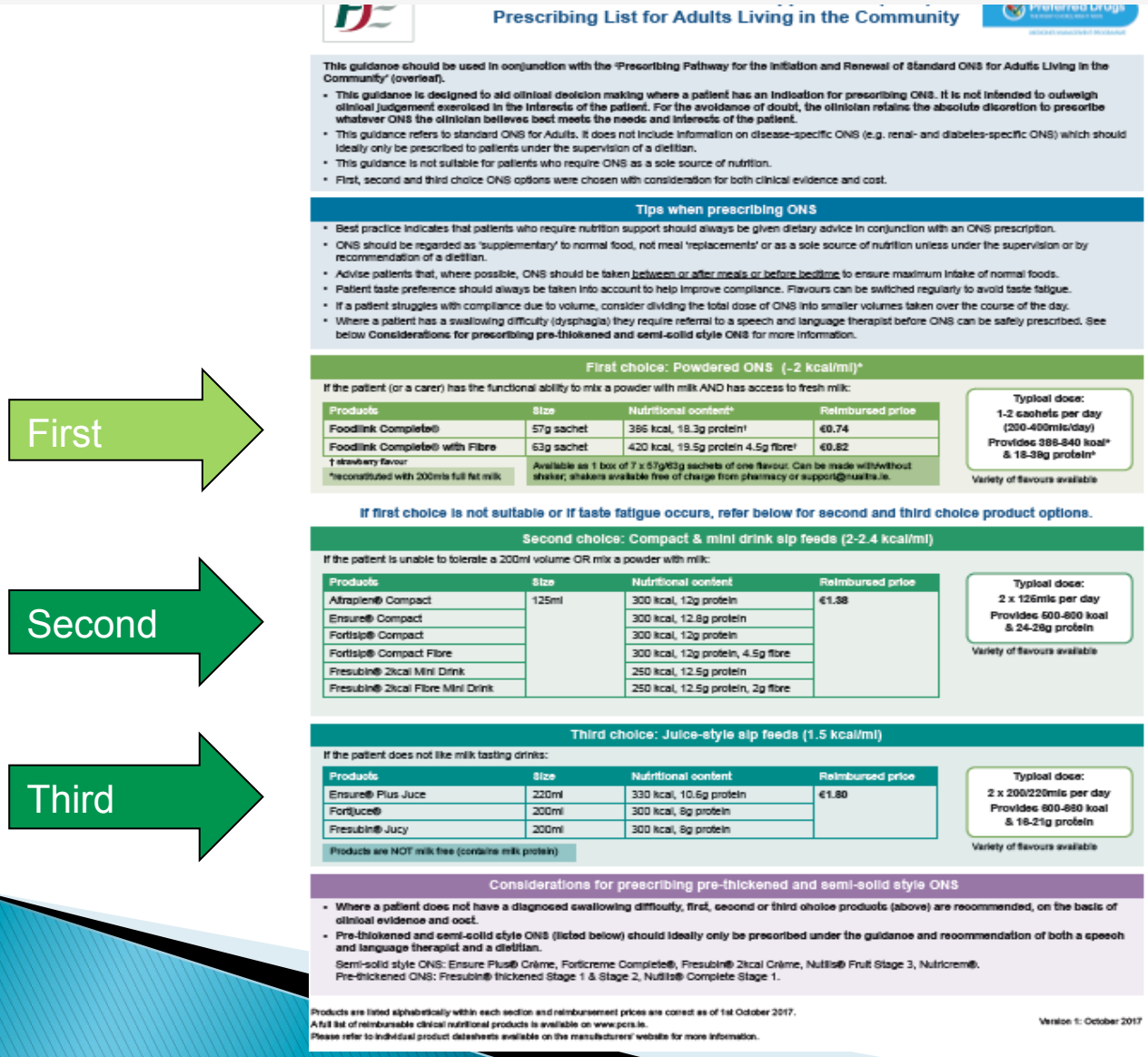
- Th BMI and who are under palliative care service

OR

- **A diagnosis of malnutrition** from a dietitian who has carried out a full nut assessment in the hospital or community setting and a recommendation from a dietitian to prescribe ONS ?

Is there anything else that should be here ?

Standard ONS Prescribing List for Adults Living in the Community (2018)



Prescribing List for Adults Living in the Community

This guidance should be used in conjunction with the 'Prescribing Pathway for the Initiation and Renewal of Standard ONS for Adults Living in the Community' (overleaf).

- This guidance is designed to aid clinical decision making where a patient has an indication for prescribing ONS. It is not intended to outweigh clinical judgement exercised in the interests of the patient. For the avoidance of doubt, the clinician retains the absolute discretion to prescribe whatever ONS the clinician believes best meets the needs and interests of the patient.
- This guidance refers to standard ONS for Adults. It does not include information on disease-specific ONS (e.g. renal- and diabetes-specific ONS) which should ideally only be prescribed to patients under the supervision of a dietitian.
- This guidance is not suitable for patients who require ONS as a sole source of nutrition.
- First, second and third choice ONS options were chosen with consideration for both clinical evidence and cost.

Tips when prescribing ONS

- Best practice indicates that patients who require nutrition support should always be given dietary advice in conjunction with an ONS prescription.
- ONS should be regarded as 'supplementary' to normal food, not meal 'replacements' or as a sole source of nutrition unless under the supervision or by recommendation of a dietitian.
- Advise patients that, where possible, ONS should be taken between or after meals or before bedtime to ensure maximum intake of normal foods.
- Patient taste preference should always be taken into account to help improve compliance. Flavours can be switched regularly to avoid taste fatigue.
- If a patient struggles with compliance due to volume, consider dividing the total dose of ONS into smaller volumes taken over the course of the day.
- Where a patient has a swallowing difficulty (dysphagia) they require referral to a speech and language therapist before ONS can be safely prescribed. See below **Considerations for prescribing pre-thickened and semi-solid style ONS** for more information.

First choice: Powdered ONS (~2 kcal/ml)*

If the patient (or a carer) has the functional ability to mix a powder with milk AND has access to fresh milk:

Products	Size	Nutritional content*	Reimbursed price
Fooditink Complete®	57g sachet	386 kcal, 18.3g protein†	€0.74
Fooditink Complete® with Fibre	63g sachet	420 kcal, 19.5g protein 4.5g fibre†	€0.82

† strawberry flavour
*reconstituted with 200mls full fat milk

Available as 1 box of 7 x 57g/63g sachets of one flavour. Can be made with/without shaker; shakers available free of charge from pharmacy or support@nutrilia.ie.

Typical dose: 1-2 sachets per day (200-400mls/day) Provides 388-840 kcal* & 18-38g protein*

Variety of flavours available

If first choice is not suitable or if taste fatigue occurs, refer below for second and third choice product options.

Second choice: Compact & mini drink sip feeds (2-2.4 kcal/ml)

If the patient is unable to tolerate a 200ml volume OR mix a powder with milk:

Products	Size	Nutritional content	Reimbursed price
Altraplen® Compact	125ml	300 kcal, 12g protein	€1.38
Ensure® Compact		300 kcal, 12.8g protein	
Fortisip® Compact		300 kcal, 12g protein	
Fortisip® Compact Fibre		300 kcal, 12g protein, 4.5g fibre	
Fresubin® 2kcal Mini Drink		250 kcal, 12.5g protein	
Fresubin® 2kcal Fibre Mini Drink		250 kcal, 12.5g protein, 2g fibre	

Typical dose: 2 x 125mls per day Provides 600-800 kcal & 24-28g protein

Variety of flavours available

Third choice: Juice-style sip feeds (1.5 kcal/ml)

If the patient does not like milk tasting drinks:

Products	Size	Nutritional content	Reimbursed price
Ensure® Plus Juice	220ml	330 kcal, 10.6g protein	€1.80
Fortijuce®	200ml	300 kcal, 8g protein	
Fresubin® Jucy	200ml	300 kcal, 8g protein	

Products are NOT milk free (contains milk protein)

Typical dose: 2 x 200/220mls per day Provides 600-880 kcal & 16-21g protein

Variety of flavours available

Considerations for prescribing pre-thickened and semi-solid style ONS

- Where a patient does not have a diagnosed swallowing difficulty, first, second or third choice products (above) are recommended, on the basis of clinical evidence and cost.
- Pre-thickened and semi-solid style ONS (listed below) should ideally only be prescribed under the guidance and recommendation of both a speech and language therapist and a dietitian.

Semi-solid style ONS: Ensure Plus® Crème, Forticreme Complete®, Fresubin® 2kcal Crème, Nutilis® Fruit Stage 3, Nutricrem®.
Pre-thickened ONS: Fresubin® thickened Stage 1 & Stage 2, Nutilis® Complete Stage 1.

Products are listed alphabetically within each section and reimbursement prices are correct as of 1st October 2017.
A full list of reimbursable clinical nutritional products is available on www.pcrs.ie.
Please refer to individual product datasheets available on the manufacturers' website for more information.

Version 1: October 2017

First

Second

Third

This list highlights the products that are most cost effective with clinical evidence for use as first line

Comparison of standard ONS

Category	High energy, standard protein	High energy Semi-solid	**Very high energy (compact/ mini drink)**	Very high energy	High energy, standard protein juice	**High energy, high protein powdered**
Example product For comparison purposes	Ensure® Plus	Forticreme Complete®	Fortisip® Compact	Ensure® TwoCal	Fortijuce®	Foodlink Complete®
Volume/ Weight	200ml	125g	125ml	200ml	200ml	57g sachet*
Energy (kcal)	300	200	300	400	300	385*
Protein (g)	12.5	12	12	16.8	8	18.4*
Cost per 100 kcal	€0.57	€0.80	€0.46	€0.55	€0.60	€0.30
Reimbursed Price	€1.70	€1.60	€1.38	€2.20	€1.80	€0.74

*Reconstituted in 200mls full fat milk

First line: Powdered ONS (~ 2 kcal/ml) 2018 list

- Is the patient able to tolerate a 200ml volume?
- Is the patient (or carer) able to mix a powder with milk?
- Has the patient access to fresh milk/fridge?

Products	Size	Nutritional content*	Reimbursed price
Foodlink Complete®	57g	386 kcal, 18.3g protein	€0.74
Foodlink Complete with Fibre®	63g	420 kcal, 19.5g protein, 4.5g fibre	€0.82

*Reconstituted with 200mls full fat milk

Typical dose:
1-2 sachets per day
(200-400mls/day)

provides 386-840 kcal*&
18-39g protein*

Second line: Compact & mini drink sip feeds (2-2.4 kcal/ml) 2018 list

- If a patient is unable to tolerate a 200ml volume OR mix a powder:

Products	Size	Nutritional content	Reimbursed price
Altraplen® Compact	125 mls	300 kcal, 12g protein	€1.38
Ensure® Compact		300 kcal, 12.8g protein	
Fortisip® Compact		300 kcal, 12g protein	
Fortisip® Compact Fibre		300 kcal, 12g protein, 4.5g fibre	
Fresubin® 2kcal Mini Drink		250 kcal, 12.5g protein	
Fresubin 2kcal Fibre Mini Drink		250 kcal, 12.5g protein, 2g fibre	

Typical dose:
2 x 125mls per day

provides 500-600 kcal & 24-26g protein

Third line: Juice-style sip feeds (1.5 kcal/ml) 2018 list

- If the patient does not like the taste of milk tasting drinks i.e. first & second line options:

Products	Size	Nutritional content	Reimbursed price
Ensure Plus Juce	220ml	330 kcal, 10.6g protein	€1.80
Fortijuce®	200ml	300 kcal, 8g protein	
Fresubin® Jucy	200ml	300 kcal, 8g protein	

Products are NOT milk free (contains milk protein)

Typical dose:
2 x 200/220mls per day

provides 600-660 kcal & 16-21g protein

UK guidance : If ONS are initiated it is suggested that:

- The person should be ideally reviewed by a dietitian .
- Use medicines management suggested products as first line –if no recommendation from a dietitian already in place
- Prescriptions should be for a limited time period (e.g. 1 month then reviewed).
- If there is no increase in weight after three months ONS should be reduced and stopped.
- If weight gain occurs, continue until the treatment goals are met (e.g. usual or healthy weight is reached) and then reduce and stop prescriptions gradually .

- Is this policy relevant in the Irish context should we adopt ?

ONS –Patient information sheet

This leaflet can be viewed, downloaded or printed from www.hse.ie/nutritionsupports

Developed by multidisciplinary working group

NALA approved

General points–Appropriate Use of Oral Nutritional Supplements

- Best practice indicates that patients who require nutrition support **should always be given dietary advice in conjunction with an ONS prescription.**

- ONS should be regarded as **'supplementary' to normal food, not meal 'replacements' o**r as a sole source of nutrition unless under the supervision or by recommendation of a dietitian.

- Advise patients that, where possible, **ONS should be taken between or after meals or before bedtime** to ensure maximum intake of normal foods.

General Points–Appropriate Use of Oral Nutritional Supplements

- Patient **taste preference should always be taken into account to help improve compliance.** Flavours can be switched regularly to avoid taste fatigue.

- If a patient struggles with compliance due to volume, **consider dividing the total dose of ONS into smaller volumes taken over the course of the day.**

- **Where a patient has a swallowing difficulty (dysphagia) they require referral to a speech and language therapist before ONS can be safely prescribed.**

Practical Demo

- Sample of different types showing differences between standard & compact
  - Nut content
  - Volume
  - Cost
  - Issues around tolerance