The importance of nutrition in pressure ulcer prevention and wound healing

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Learning outcomes

- To have an understanding of prevention of pressure ulcers using the aSSKINg bundle
- To gain more in depth understanding of how nutrition plays an important part in the viability of our tissue
- To identify high risk individual's due to their medical considerations
- To understand how nutrition helps with healing wounds and how to do this in practice

SSKIN Bundle

Assessment

Skin Inspection: Early inspection means early detection. Show patients and carers what to look for.

Keep your patients moving.

Incontinence/ Moisture: Your patients need to be clean and dry.

Give information

Involve the person affected, their carers and family

Surface: Make sure your patients have the right support.

Nutrition/ Hydration: Help patients have the right diet and plenty of fluids.

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What is a pressure ulcer?

A pressure ulcer is localised damage to the skin and/or underlying tissue, usually over a bony prominence (or related to a medical or other device), resulting from sustained pressure (including pressure associated with shear). The damage can be present as intact skin or an open ulcer and may be painful

NHS Improvement 2018

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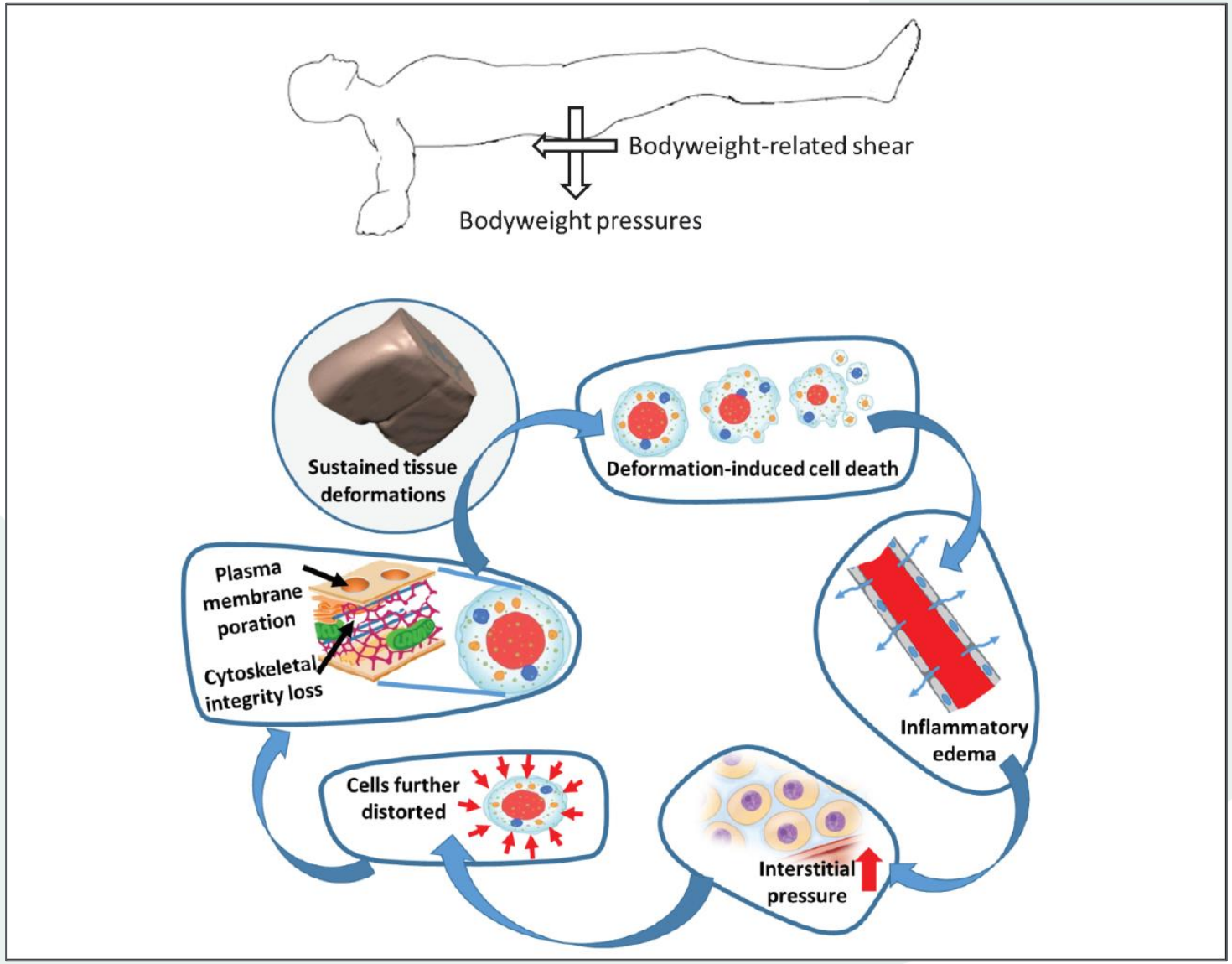

Diagram From EPUAP, NPUAP, PPPIA 2019 (Permission from A. Gefen)

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Signs of malnutrition and poor hydration

- Pale - anaemia
- Lethargic
- Dry, cracked skin
- Loss of appetite
- Deterioration in the skin
- Headaches
- Elderly
- Respiratory conditions
- Cardiac conditions
- High caffeine intake
- Certain medications – Metformin, steroids, acid reflux tablets

Lack of oxygen

Lack of water

Lack of red blood cells

Factors associated with pressure ulcer development

Extrinsic

Pressure
Shear
Friction
Restricted mobility
Moisture/ dry skin
Surgery
Poor moving and handling
Medication
Poor hygiene
Inappropriate clothing

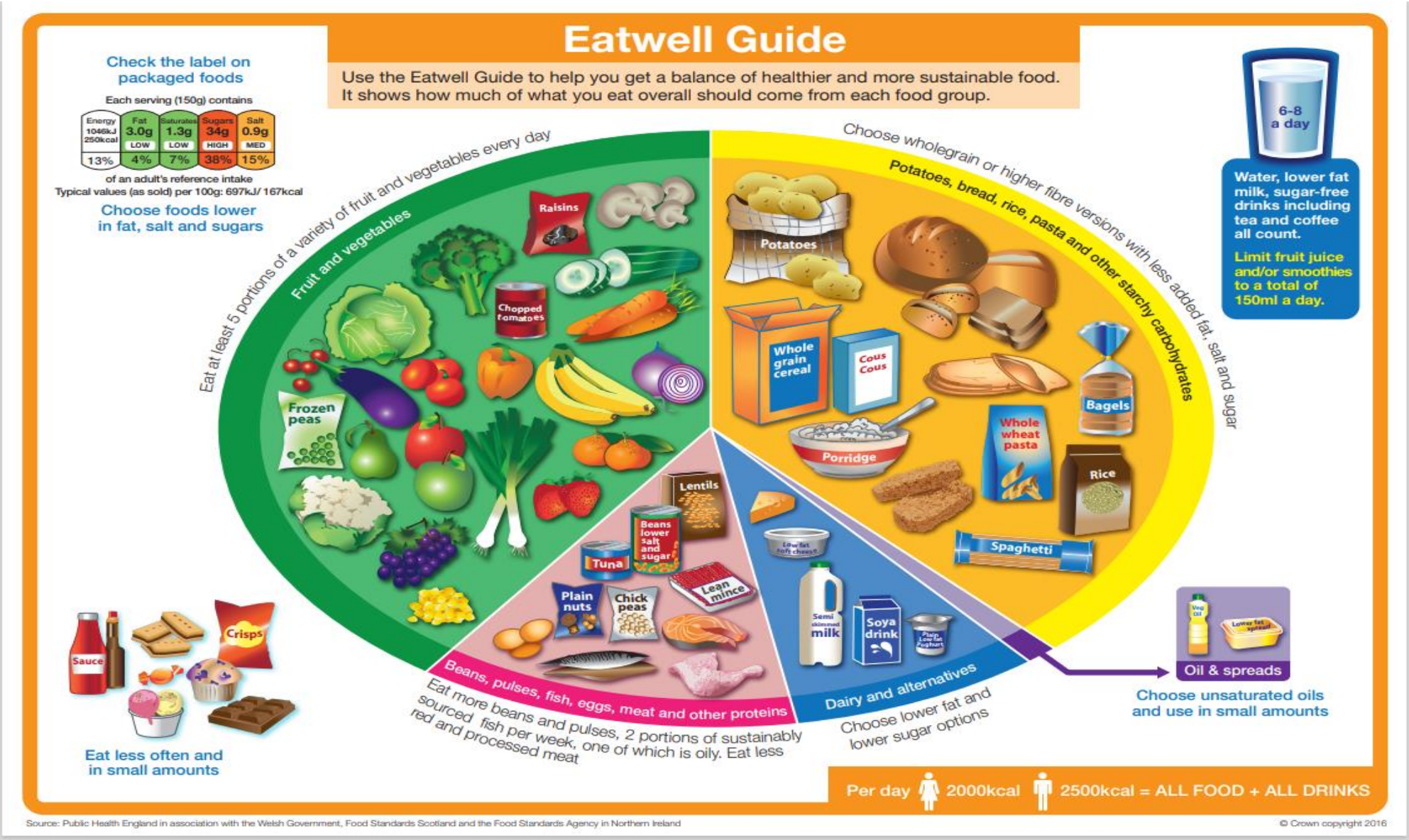
Intrinsic

- Nutritional Status
- Build
- Age
- Sensory Impairment
- Incontinence
- Infection
- Circulatory Disorders
- Dehydration
- Mental Status
- Neurological Disorders

Overview of Nutrition

- Made up of
  - Carbohydrates
  - Proteins
  - Fats (lipids)
  - Vitamins and minerals
  - Fibre
  - Water

Eatwell Guide



Role of Nutrients in the Body

- Carbohydrates – provides main source of energy
- Protein –major source of energy and it is broken down in amino acids
- Lipids –another source of energy and via for some of the fat soluble vitamins
- Vitamins & minerals – required for normal cellular function and how the whole body functions
- Fibre – keeps our digestive system healthy and prevents constipation
- Water – essential for survival and multiple functions

What affects our nutritional intake?

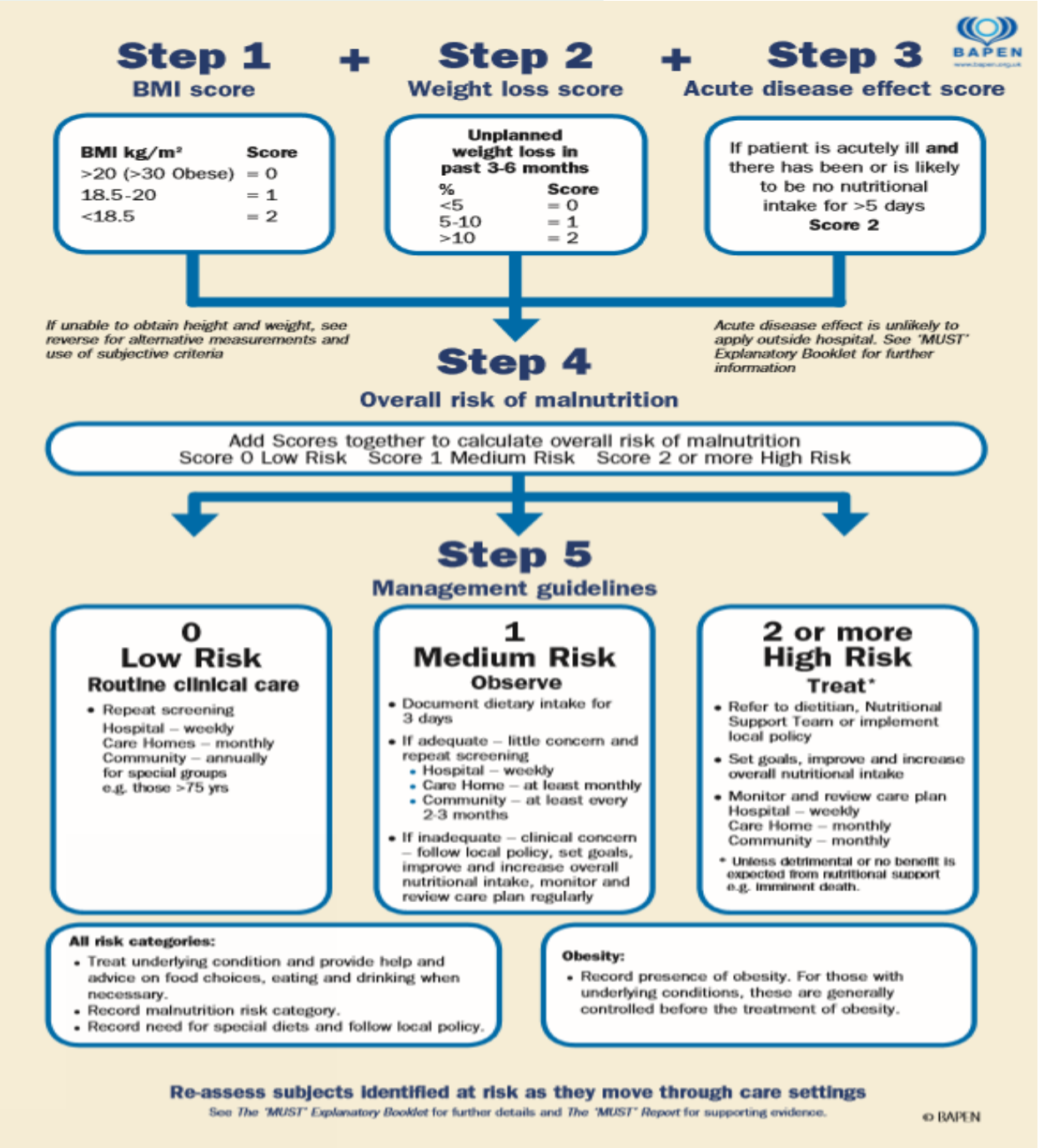
- Health
- Independence and function
- Bowels
- Co-morbidities

Nutrition Screening

- First step in identifying those as risk
- Screen regularly to detect changes
- Different tools available
- People can self screen

MUST

- Validated screening tool
- Both hospital and community use
- Not specifically designed for those with learning or physical disabilities



Who's at risk of malnutrition?

- Chronic disease e.g. COPD and cancer
- Progressive neurological diseases e.g. dementia or MND
- Acute illness e.g. fractured hip
- Frailty e.g. immobility and old age
- Neuro-disability e.g. learning disability and cerebral palsy
- Impaired swallowing

Dysphagia

Difficulty in swallowing certain foods and/or drinks or not being able to swallow at all.

- Cerebral palsy, stroke, dementia, multiple sclerosis, Parkinson's disease, motor neuron disease
- Oral and oesophageal cancers

Ways to help

Early satiety reduced appetite	Loss of taste or smell	Dry/sore mouth, fatigue	Swallowing issues
• High energy foods • Eating little and often	• Add herbs and spices • Marinating • Sauces • Offer new foods	• Soft and easy to chew foods • Moist foods • Additional sauces or gravy • Check dentition or for oral thrush	• Seek advice of Speech and Language therapist • Modifying consistency of fluids and drinks • Modified texture diets • Correct posture or position of individual

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How nutrition helps healing

- Protein –the basic component of all cells and a vital part of cellular structure, formation of collagen and keratin (muscles and bones)
- Lipids – important role in cellular structure as well as another source of energy
- Vitamins C – plays role in collagen structure formation
- Zinc – essential mineral involved in cellular metabolism

Ways to help for wound healing

- Increase protein intake
    - 25-30g of protein each meal
- Increase overall calorie intake
- Nourishing milky drinks
    - Hot chocolate, smoothies, milk shakes

Fortifying diets

- Skimmed milk powder
  - Can be added to milk shakes or smoothies
- Full fat milk
  - Can be added to soups
- Egg white powder
  - Can be added to fruit juice to increase calories and protein content
- Double cream
  - Can be added to milk shakes, smoothies, mashed potatoes, sauces to increase both calories and protein

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Thank you

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