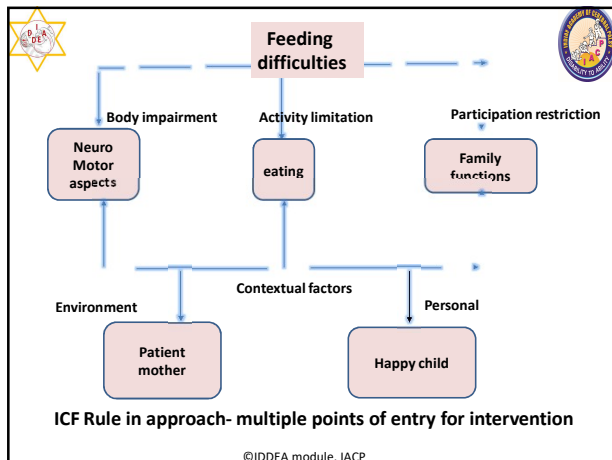


Eating and drinking classification system [EDACS]

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Learning Objectives

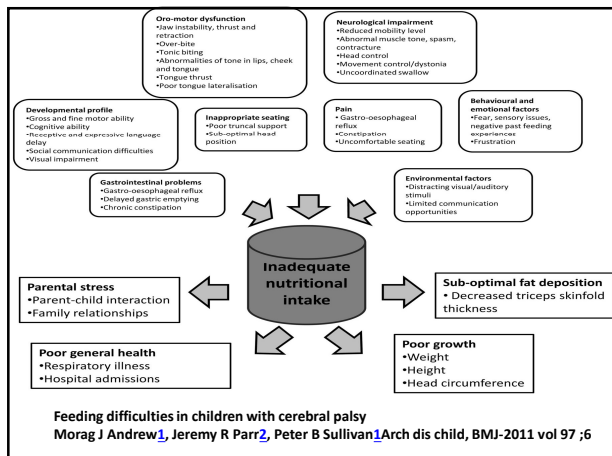
- Understand impact of feeding problems in children with developmental disorders
- Understand neuropathological basis of eating and drinking
- Grade severity of eating & drinking dysfunction in children with developmental problems
- Know the impact of eating & drinking problems in ICF domains
- Familiarise with some of the home based interventions available to optimise eating & drinking activities in children with developmental problems



Impact of feeding problems

- ▶ Nutrition ,Growth, Respiratory infections & Gastro intestinal problems (GERD to haemorrhoids & irritable bowel syndrome, later bone health)
- ▶ Time consumed during meal time [insistence on oral feeding & refusal for gastrostomy- family choice vs child health]
- ▶ Limitation in activities & societal participation
- ▶ If associated with drooling, embarrassment in company.
- ▶ May affect self esteem, cause depression
- ▶ May be associated with dysarthria in dyskinetic & ataxic cp. Common with GMFCS 4 &5


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Neuromotor components of eating & drinking

- ▶ Muscle tone
- ▶ Reflex activity
- ▶ Specific motor skills & coordination
- ▶ Sensorimotor impairment, gross and fine motor limitations, and cognitive/communication deficits
- ▶ Can be present across all GMFCS levels

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Functional Classification-EDACS

- ▶ To classify how individuals with cerebral palsy eat and drink in everyday life .
- ▶ Focus on sucking, biting, chewing, swallowing and keeping food or fluid in the mouth.
- ▶ Levels are not age dependent
- ▶ It is not an assessment tool.
- ▶ **EDACS refers to safety and efficiency in eating and drinking**
- ▶ Eating and swallowing are complex behaviors involving **volitional and reflexive activities** of more than 30 nerves and muscles.

Two crucial biological features:


- ▶ food passage from the oral cavity to stomach
- ▶ and airway protection.

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Gathering Information-Key questions to ask parents

Questions	Red flags
How long does it take to feed your child?	More than 30 min, on any regular basis
Are meal times stressful to child or parent?	Yes, if one or other, or both
Is your child gaining weight adequately?	Lack of weight gain over 2–3 months in young child, not just weight loss
Are there signs of respiratory problems?	Increased congestion at meal times, ‘gurgly’ voice, respiratory illnesses





Feeding observation and synthesizing information for intervention

- ▶ Observe
- ▶ Sucking pattern
- ▶ Biting
- ▶ Chewing
- ▶ **OF** Fluids ,Pureed foods& Solids

Feeding children with cerebral palsy and swallowing difficulties J.C.Anselton
European Journal of Clinical Nutrition volume67, pagesS9-S12 (2013) Published:04 December 2013

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EDACS

- Level 1** – Eats and drinks safely and efficiently.
- Level 2** – Eats and drinks safely but with some limitations to efficiency.
- Level 3** – Eats and drinks with some limitations to safety; there maybe limitations to efficiency.
- Level 4** – Eats and drinks with significant limitations to safety.
- Level 5** – Unable to eat and drink safely- tube feeding maybe considered to provide nutrition.

www.sussexcommunity.nhs.uk



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Level 1 -Eats and drinks safely and efficiently

- ▶ Eats a wide range of age appropriate foods.
- ▶ Can move food from one side of the mouth to the other and closes lips while chewing.
- ▶ Coughing or gagging may occur for very challenging textures.
- ▶ Loses very little food or fluid from the mouth.
- ▶ May be challenged by some **very** firm bite and chew foods.

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Level 2- Eats and drinks safely but with some limitations to efficiency.

- ▶ Eats a wide range of age appropriate foods.
- ▶ Challenged by **some** firm bite, effortful chew, mixed and textures.
- ▶ Coughing or gagging on **new or challenging** textures **or when tiring**.

NOTE: Difference between level 1 and 2

- may tire if textures challenging
- mealtimes will take longer than for peers in level 2

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Level 3- Eats and drinks with some limitations to safety; there maybe limitations to efficiency.

- ▶ Eats puree and mashed food and may bite and chew some soft food textures.
- ▶ Challenged by large lumps, firm bite and effortful chew textures which can lead to **choking**.
- ▶ May drink from an **open cup**, but drinking from cup with a lid or spout may be required to control the flow of fluid.
- ▶ **Thickened fluids** may be easier to drink than thin
- ▶ individual may need time between sips.

NOTE: Level 3 requires modification in food textures and quantity .

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Level 4- Eats and drinks with significant limitations to safety.

- ▶ Eats smooth purees or well mashed food.
- ▶ Challenged by food that requires **chewing**.
- ▶ Lumps may be swallowed whole.
- ▶ Food may be stuck in the mouth.
- ▶ **NOTE:** difference between level 3 and 4 is **close attention** needed to reduce risks of aspiration and choking(texture, consistency and method of feeding).

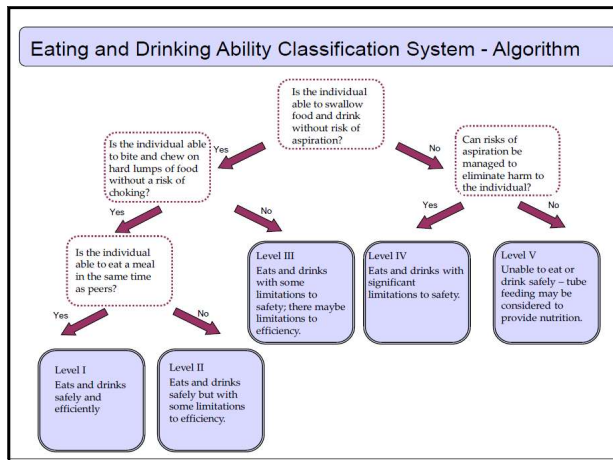
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Level 5- Unable to eat and drink safely- tube feeding maybe considered to provide nutrition.

- ▶ Unable to swallow food or drink safely because of limitations to the range and co-ordination of movement for swallowing and breathing.
- ▶ Aspiration and choking are very likely.

NOTE: Alternative means of providing nutrition such as tube feeding may be considered.

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INTERVENTION

- ▶ Facilitate alignment
- ▶ Proximal stability
- ▶ Facilitate appropriate oral movement patterns.
- ▶ Team approach between members to facilitate families and children to take decisions on intervention which is a process.
- ▶ Assistive devices including tube feeding, gastrostomy & fundal plication to facilitate independence.
- ▶ Regular nutritional & growth evaluations including bone health-anticipatory guidance depending upon severity & **individualized diet advice-50% do not get any diet advice**
- ▶ Bio-psychosocial approach including care givers

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Level 2

Level 3

Level 4- no self feeding, efficiency & safety may be affected

Level 5



SUMMARY



- ▶ Children with CP present with a wide range of feeding and swallowing problems that need to be scrutinized comprehensively and monitored over time.
- ▶ All children deserve opportunities for oral feeding to whatever extent is possible in light of pulmonary status and oropharyngeal skill levels, in developmentally appropriate ways.
- ▶ It is hoped that all oral taste and feeding experiences are non-stressful for children and their parents.
- ▶ No matter how much care givers and therapists want children to be total oral feeders, nutrition and hydration needs should always take top priority.
- ▶ Children must be well nourished in order to maximize developmental function and overall health (where possible)

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