



We Treat Kids Better

Nutrition focused physical assessment: Common Senses

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Objectives

- At the end of the presentation participants will be able to:
- Describe two physical parameters that can be used in nutrition focused clinical assessment
- Utilize nutrition focused physical findings to determine nutritional status
- Write a PES statement utilizing standardized NCP language, using nutrition focused physical findings.

Nutrition Focused Physical Exams

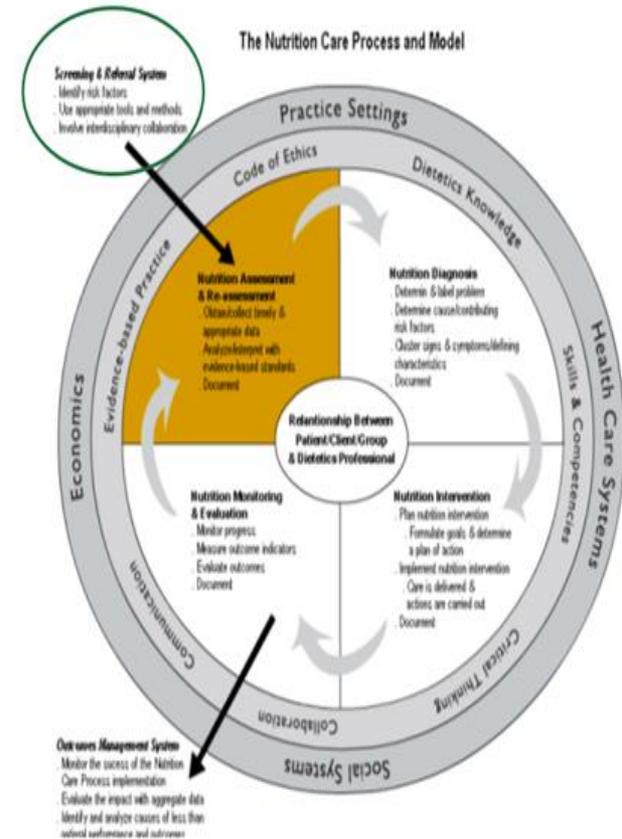
“I am an RD....do I have to do this..?”

Answer: it is a requirement of TJC that patients receive periodic assessment of their nutriture using focused physical findings.

“I am an RD...is this within my scope of practice?”

Answer: Yes it is, with demonstrated and documented competence of appropriate knowledge and skills.

- Nutrition care process
 - Nutrition Assessment
 - Nutrition Diagnosis
 - Nutrition Intervention
 - Nutrition Monitoring and evaluation.



- Gather data, considering
 - Dietary intake
 - Nutrition related consequences of health and disease condition
 - Anthropometrics
 - Biochemical
 - Clinical assessment/Physical findings
 - Psycho-social, functional, and behavioral factors
 - Knowledge, readiness, and potential for change

- **SYSTEMATIC**
 - Organized
 - Logical
- **REPLICABLE**
 - Evidence based
 - Validated measures

Gathering Physical Data

- **Review of Medical record**
 - Vital signs (blood pressure, heart rate)
 - Weight, length, head circumference
 - Oxygen saturation
 - temperature
- **Inspection (sight, smell, hearing)**
- **Palpation/Percussion (tactile/touch)**
- **Auscultation (listening)**

INSPECTION

SEE (rash, sweating or color)

HEAR (audible changes in breathing, swallow)

SMELL (ketones, urea/ammonia, reflux breath)

TOUCH

PALPATION

PERCUSSION

Sign vs Symptoms

SIGN is what YOU see, a SYMPTOM is what your CLIENT experiences

Symptom	Sign	Nutrient
headache	Dry skin	water
lethargic	Pale conjunctiva	iron
weakness	edema	Protein
Tingling fingers	Beefy tongue	B12

Nutrition Related Disorders in Pediatrics

- Malnutrition account for 45% of deaths for children under the age of 5
- Dehydration
- Protein-energy malnutrition
- Obesity
- Iron deficiency anemia

Physical Findings: Dehydration

Circulation and hydration

- Normal skin and eyes
- Moist mucous membranes

- Tachycardia:
 - >160 beats/minute, age <12 months
 - >150 beats/minute, age 12–24 months
 - >140 beats/minute, age 2–5 years
- CRT \geq 3 seconds
- Dry mucous membranes
- Poor feeding in infants
- Reduced urine output

- Reduced skin turgor

Reference standards

- Capillary Refill time (low inter rater reliability)
 - Make sure that the digit is raised slightly above the heart
 - Room is at an ambient temperature (not too cool or warm)
 - Child is in a calm state (not post exercise)

Squeeze until the digit blanches (turns white). Color should return in < 3 seconds (typically within 2 sec)

Skin turgor

- Potential sites
 - Back of the hand
 - Abdomen
 - Clavicle region
- Pinch skin between thumb and forefinger. Skin should recoil in < 2 seconds.

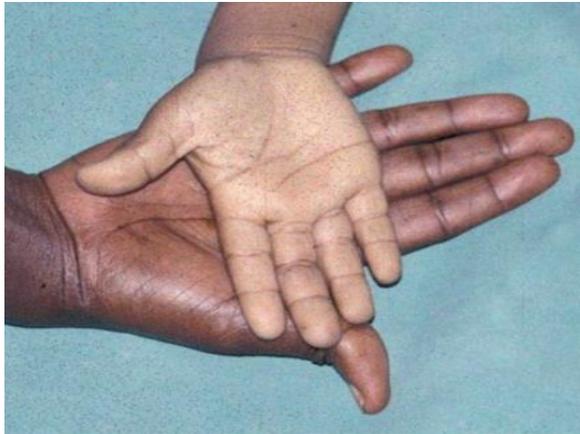


Sunken Fontanel



Physical Findings: Iron Deficient anemia

- Nails Spooning
- Pallor
- Pale inner eye-lids



Physical Findings : Edema



ASSESSMENT OF PITTING EDEMA			
2mm or less = 1 + Edema	2-4mm = 2 + Edema	4-6mm = 3 + Edema	6-8mm = 4 + Edema
<ul style="list-style-type: none"> ✓ Slight pitting ✓ No visible distortion ✓ Disappears rapidly 	<ul style="list-style-type: none"> ✓ Somewhat deeper pit ✓ No readably detectable distortion ✓ Disappears in 10-15 seconds (2-4 mm indent) 	<ul style="list-style-type: none"> ✓ Pit is noticeably deep ✓ May last more than 1 minute ✓ Dependent extremity looks fuller and swollen (4-6mm) 	<ul style="list-style-type: none"> ✓ Pit is very deep ✓ Lasts as long as 2-5 minutes ✓ Dependent extremity is grossly distorted (6-8mm)

Gluteal and Inguinal folds



Physical finding: wasting

Buccal pads, Periorbital



Physical finding : wasting

- Ribs visible
- Lower costal margin
- Decreased muscle bulk on arms and legs
- Protruding joints (knee and shoulder)
- Prominent clavicle



Physical finding: Skin discoloration/pigmentation



Physical finding: skin change in texture

- Acanthosis and striae located in axillary areas
- Soft velvety in texture
- Linked with insulin resistance and metabolic syndrome



What do you See?



What do you see?



What do you see?



What do you see?



Baby David

6 months old, full term, birth weight 7 lbs (3.2 kg), birth length 20.5 in (52 cm)

Today's weight 12 lbs 4 oz (5.6 kg), length 24.5 in (64 cm)

Intake 30 oz of Enfamil Lipil (recipe 4 scoops of powder to 6 ounces of water)

Output 5 loose stools, 4 wet diapers

Medical record

- Blood pressure within normal limits
- Respiratory and heart rate high
- Pulse oxygenation 90% room air

Inspection

- Thin face, lips oral cavity dry
- Subcostal margin visible
- Saggy gluteal folds

Palpation

- Skin turgor > 2 secs
- Cap refill > 4 secs

POTENTIAL PES STATEMENTS

Inadequate intake of energy and protein related to multiple loose stools, evidenced by loss of buccal pads.

Inadequate fluid intake related to multiple stools evidenced by slow cap refill and poor skin turgor

Increased energy expenditure related to increased effort of breathing evidenced by increased respiratory rate and low O₂ saturation.

- Ashleigh, 14 year old admitted for T&A. Based on previous admission earlier this year she has gained ~7 lbs in 5 months.
- Ashleigh denies any concerns about her weight. When you come into her room she is eating a large bag of Hot Cheetos.
- Mother states that she works long hours, leaving Ashleigh in charge of getting her own food

NF Physical Exam

Medical record

- Blood pressure 145/89
- Respiratory rate 86 bpm
- Weight 198 lbs
- Height 5'7"

Inspection

- Acanthosis nigricans
- Striae on abdomen
- Waist circumference 42 in

Let's work together in groups of 2-3 to develop at least 2 PES statements.

- Problems

- Etiology

- Symptom

- Systematic observation of physical findings are embedded in the nutrition care process
- There are multiple sites that yield important information that may impact nutritional status
- If you want to know more the DNS (dietitians in nutrition support) practice group sponsors workshops during the year.

Thank you

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