optimal
nutritional care
for all

Fair Access & Shared Decision Making
18 Countries, One Mission
"Oral and physical assessment as a tool for improving nutritional treatment"

Prof Ronit Edelevlt- RD, PHD, Head of the Nutrition department
Josefa Kachal- RD ,MPH , Nutrition coordinator for Geriatric Nutrition, Nutrition division
Galia Hillel-Shefer - RD, MSc ,District Ministry of Health. Haifa
Poor oral health status and malnutrition are related.
Poor oral health leads to malnutrition—WHY & HOW??

Low socioeconomic status, functional limitation, chronic diseases, cognitive impairment

→ Lead to poor oral hygiene and to the **inability** to take care of teeth

→ Loss of teeth, periodontal disease, pain, biting and chewing difficulties

→ Less food variety and quantity (vegetables, fruit and meat products, whole grains, nuts)

→ Nutrient deficiencies (vitamins, fiber, minerals, proteins), constipation, weight loss, dehydration—**malnutrition**
Figure 3
Possible pathway from oral health problems to malnutrition

Healthy Mouth

Poor Hygiene

No Treatment

Caries

Tooth Loss

Chewing Problems

Change in Food Preferences

Healthy Mouth

Periodontal Diseases

Loose teeth

Pain

Successful Treatment

Less Fiber
Less Protein
Less vitamins (A, B1-12, C)
Less Calcium
Less Folic acid
Less Carotenoids
Less Ascorbic acid
Less Energy intake

More Carbohydrates
More Saturated Fat

Quality of food
Consistency of food

Malnutrition
Weight loss
Obesity
Fatigue

Higher risk for infection
Digestive disturbances
Cholitis

Diagram by RC Castrejón-Pérez
Position of the Academy of Nutrition and Dietetics: Oral Health and Nutrition

POSITION STATEMENT
It is the position of the Academy of Nutrition and Dietetics that nutrition is an integral component of oral health. The Academy supports the integration of oral health with nutrition services, education, and research. Collabora-

Food and nutrition professional

Clinical setting
- Include oral health screening as a component of nutrition care process tasks—nutrition screening, nutrition assessment (e.g., cranial nerve function, occlusion, soft tissue, edentulism, masticatory ability, swallowing, salivary adequacy, intervention, and monitoring)
- Recognize oral manifestations of systemic diseases and provide patients with guidelines to maximize oral intake
- Confer with and refer patients (via consults) to dental practitioners for management of oral diseases and or risk factors for oral diseases
- Consult with dental professionals in interpretation of oral-nutrition assessment findings and planning in the long-term care setting

Oral Health assessment training for registered dietitians in Israel practicing in Geriatric health facilities (hospitals, nursing homes, home care)

ASSESSMENT TOOL DEVELOPMENT

A Novel Approach to Oral Health Assessment Training for Dietitians in Long-Term Care Settings in Israel
A Pilot Study of Changes in Knowledge and Practice

Rebecca A. Brody, PhD, RD, LD, CNSC;
Riva Touger-Decker, PhD, RD, FADA;
Diane Rigassio Radler, PhD, RD; J. Scott Parrott, PhD;
Shelly Elbaum Rachman, MS; Naomi Trostler, PhD, RD
Objectives

1. To provide dietitians with education and training to conduct ‘Nutrition Focused Physical Examination’ of the head, neck, and oral cavity so that they are competent in identifying non-normal conditions affecting biting, chewing, drinking, swallowing, and potential nutrient deficiencies.

2. The dieticians will provide appropriate counseling (personalized nutrition plan).

3. The training will improve patient care outcomes in regards to oral health care as measured by improved general nutrition status and oral health, and increased referral to other health care providers.
Methods

- In 2011 Prof Riva Touger-Decker, Rutgers university introduced a workshop on Nutrition Focused Physical Assessment to dieticians working in Geriatric facilities in Israel.
- 140 dieticians were trained in performing the examination followed by supervision meetings.
- Personalized nutrition interventions were planned following the findings.
- Infrastructure was formed to document the information in the medical record.
- Protocols were developed for the integration program of the interdisciplinary team.
The Nutrition Focused Physical Examination checked for:

- Pain in mouth: lesions, stomatitis, decayed teeth, bad fitting dentures
- Sensor or motor problems affecting head and neck
- Lack of sense of smell
- Distorted taste
- Xerostomia (The technical term for dry mouth is xerostomia)

Dropped Head Syndrome
examples of intervention strategies by dieticians for improving food intake

**XEROSTOMIA (dry mouth)**
- Adjust medication?
- Add extra drinks
- Add sauces to food
- Puddings and fruit shakes

**Oral pain/lesions/stomatitis/candida**
- Check oral hygiene
- Consult doctor/dentist
- Avoid spicy and sour food
- Provide softer textured food
- Offer cold fluids at meals
Examples of intervention strategies by dieticians for improving food intake

**Altered taste perception**
- Adjust medication?
- Check oral hygiene
- Observe what is eaten and what isn’t
- Augment taste (salt/sugar/spices/sauces)
- Add flavours: mayo/ketchup/mustard
- Zinc supplement ??

**Difficulty opening mouth**
- Consult doctor
- Cut food to smaller pieces
- Provide softer textured food
- Use a smaller spoon
- Offer more snacks
Chewing Disorder

Lack of back teeth

Finely chopped/cooked food

Lack of front teeth

Cutting food into small pieces
RESULTS: The nutrition focused oral health assessment led to improved food intake and coordination among the interdisciplinary team

- Food intake improved due to the detection and adjustment of the diet (menu)
- Prevention of the need for tube feeding- patient could eat per-os
- The oral health assessment led to an accurate nutritional plan
- Food texture was better adapted to the older adult
- Dentists were summoned to treat the older adult who had dental problems
- A discussion on oral health issues took place in interdisciplinary meetings
In summary

Physical assessment of Head, Neck and Oral Health performed by dieticians as part of a comprehensive nutritional assessment, followed by a personalized nutrition plan can improve quality of life and nutritional status.

It is our patient’s right to receive real food that is suited to his needs.