

DEMENZE E DISFAGIA

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**NELL'INVECCHIAMENTO FISIOLÓGICO COME NEL DECLINO
COGNITIVO PATOLOGICO**

**LA PERFORMANCE DEGLUTTITORIA E' IL RISULTATO DI
DIFFERENTI COMPONENTI:**

COMPORAMENTALE, SENSORIALE E MOTORIA

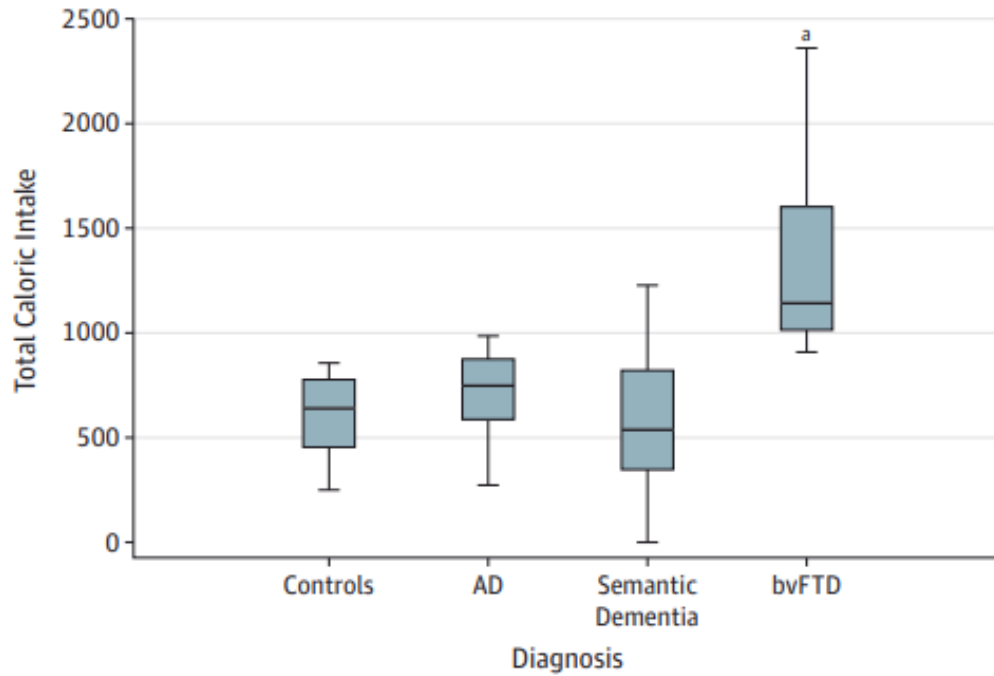
COMPORTAMENTO ALIMENTARE

- ④ Scelta dell'alimento: include tutti gli aspetti che precedono l'introduzione del boccone nel cavo orale
- ④ Gestione del bolo alimentare: sia manuale che orale
- ④ Introito calorico/Nutrizione: apporto calorico, assunzione di tutti i macro e micronutrienti etc

COMPORAMENTO ALIMENTARE

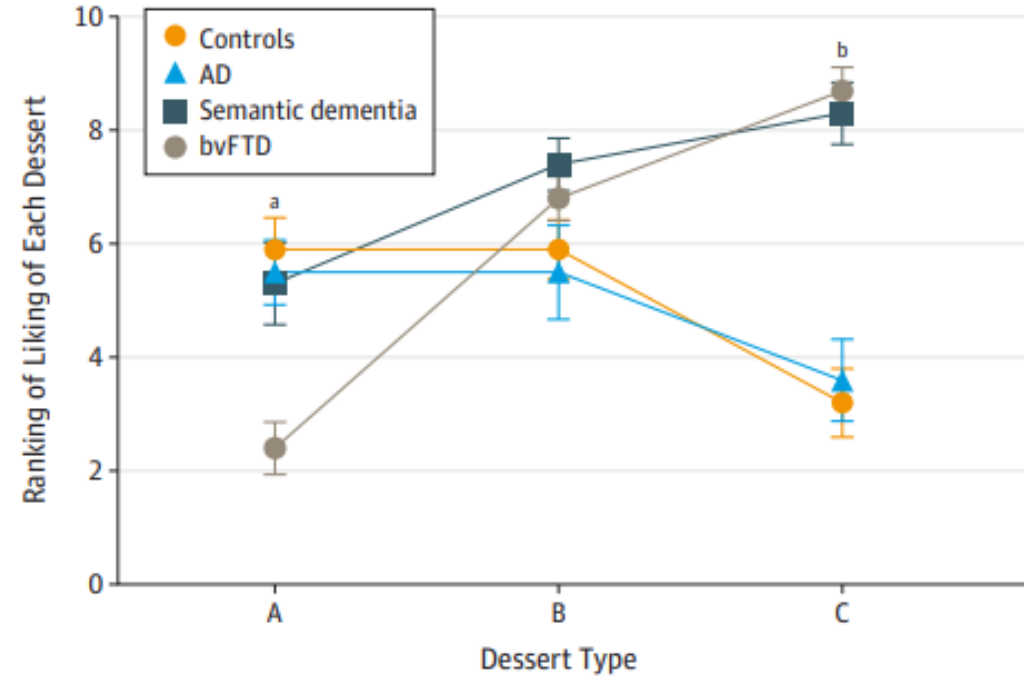
Alterato intake calorico

A Total caloric intake on ad libitum breakfast test meal



Alterate preferenze dietetiche

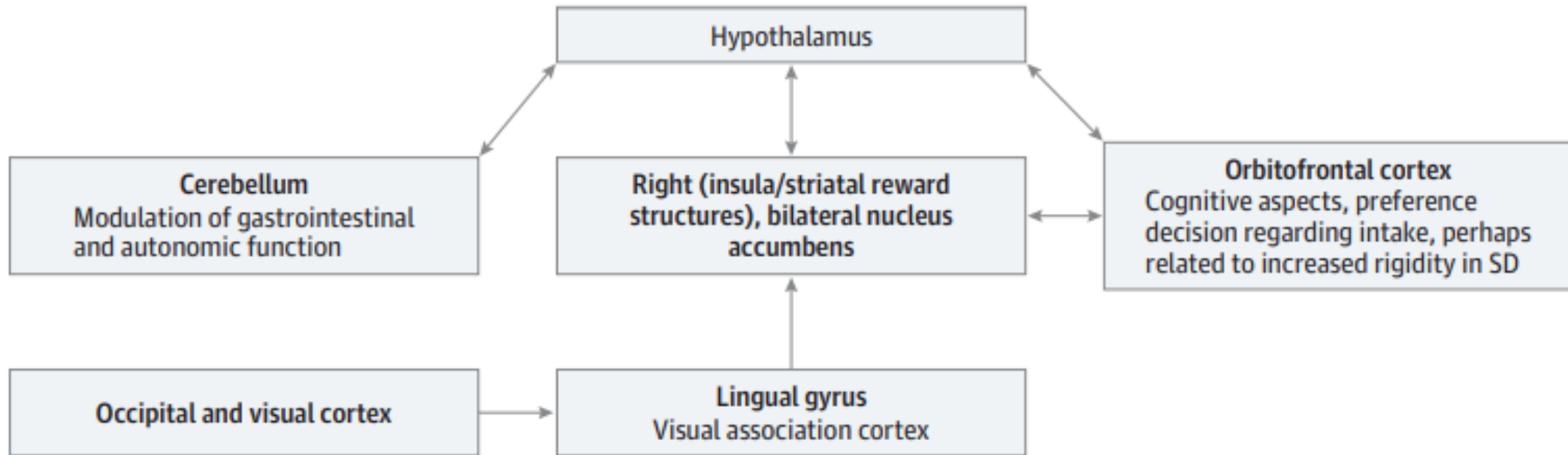
B Mean liking ratings of each dessert



(Ahmed et al. 2016)

COMPORTAMENTO ALIMENTARE

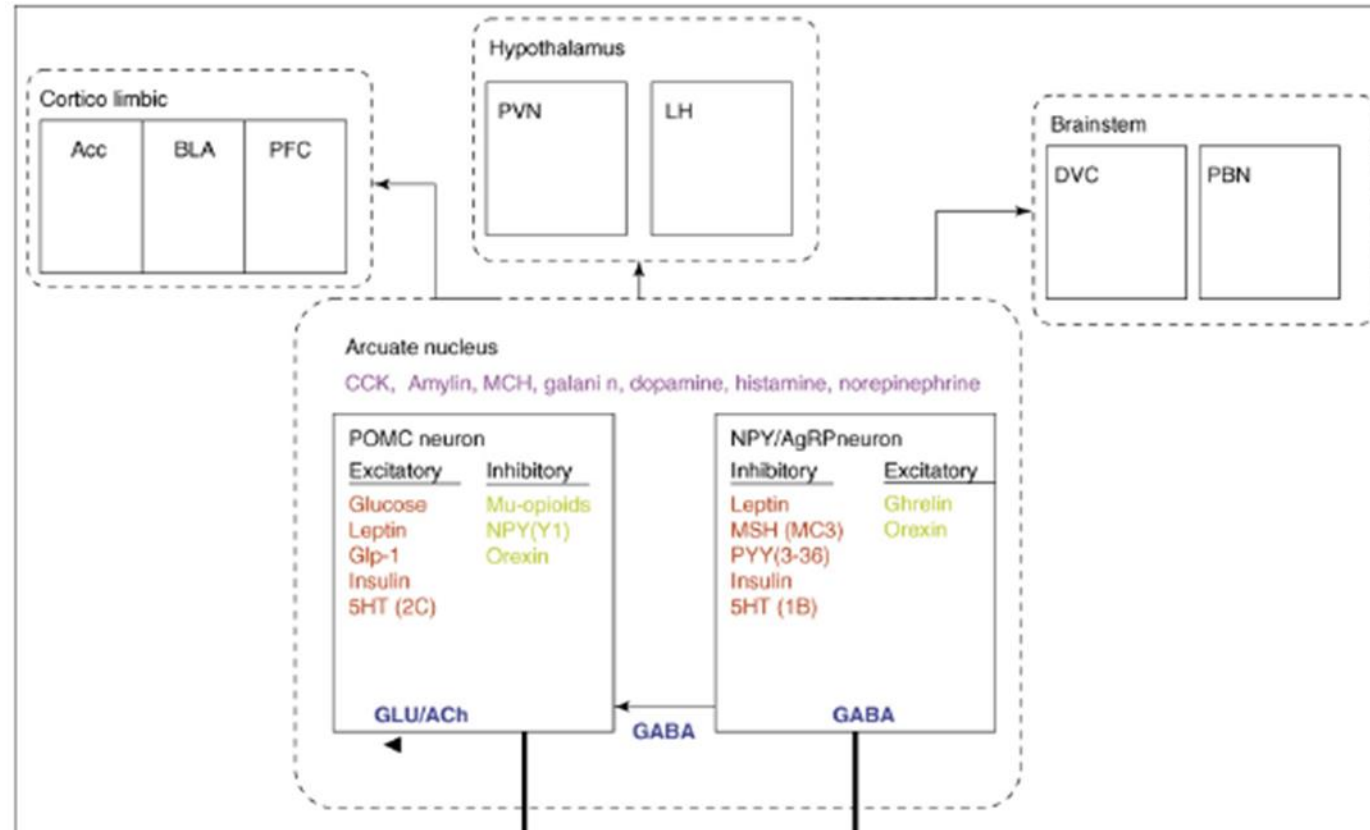
🎯 Network neurale di controllo



(Ahmed et al. 2016)

COMPORAMENTO ALIMENTARE

- ⊗ Segnali di sazietà post-prandiali (CCK, PYY) sono rafforzati nei soggetti anziani (*McIntosh et al. 1999; Di Francesco et al. 2005*)
- ⊗ I livelli sierici di ghrelina sono ridotti (*Rigamonti et al. 2002*)
- ⊗ Alte concentrazioni di leptina a digiuno sono stati riscontrati negli anziani (*Gomez et al. 2003; Ruhl et al. 2001; Zamboni et al. 2004*), con un incremento della resistenza che cresce con l'età (*Zoico et al. 2008*)
- ⊗ Circa il 40% dei soggetti con AD presentano calo ponderale (*Wallace et al. 1995*). Studi longitudinali hanno mostrato un calo di peso già nei primi stadi malattia (*Gillette-Guyonnet et al. 2000*) e può anticipare la diagnosi di parecchi anni (*Barrett-Connor et al. 1996; Stewart et al. 2005*)



(Adan et al. 2008)

COMPORAMENTO ALIMENTARE

🎯 Eating Behavior Scale (EBS)

	Never	Seldom	Sometimes	Often	Very often
Expected domain 1: Eating while focusing on the food					
1. I notice flavors and textures when I'm eating my food ^a	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I stay aware of my food while eating ^a	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I notice how my food looks ^a	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I notice the smells and aromas of food ^a	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. It is easy for me to concentrate on what I eat ^a	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Expected domain 2: Eating while paying attention to hunger and satiety cues					
6. I trust my body to tell me when to eat ^b	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. I trust my body to tell me what to eat ^b	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. I trust my body to tell me how much to eat ^b	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. I rely on my hunger signals to tell me when to eat ^b	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. I rely on my fullness signals to tell me when to stop eating ^b	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. I trust my body to tell me when to stop eating ^b	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Expected domain 3: Being aware of eating					
12. I snack without being aware that I am eating ^b	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. I eat automatically without being aware of what I eat ^a	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. I eat something without really being aware of it ^a	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Expected domain 4: Eating while not being distracted					
15. My thoughts tend to wander while I am eating ^c	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. I think about things I need to do while I am eating ^c	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. I multi-task while I am eating ^a	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. I eat at my desk or computer ^a	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. I watch television while I am eating ^d	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. I read while I am eating ^d	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

^aDerived from the Mindful Eating Scale.¹³

^bDerived from the Intuitive Eating Scale-II.²¹

^cDerived from the Mindful Eating Questionnaire.¹⁰

^dSelf-designed.

Figure 3. Initial 20-item Mindful Eating Behavior Questionnaire (English version): Origin of items and expected domains.

🎯 Appetite and Eating Habits Questionnaire (APEHQ)

Appetite and Eating Habits Questionnaire

For a family member or close friend to complete

Your Name: _____ Today's date: ___/___/___

Patient's Name: _____ Relationship to the patient: _____

We would like to ask you a number of questions about changes in the patient's appetite and other eating habits that you may have noticed. Your view is important as it will help us in our assessment.

Please read each question carefully. For each question, indicate the frequency of the behaviour, followed by the level of severity (see Severity Scale in each section to assist in rating this).

All questions apply to the patient's behaviour OVER THE PAST MONTH

Section 1: Swallowing

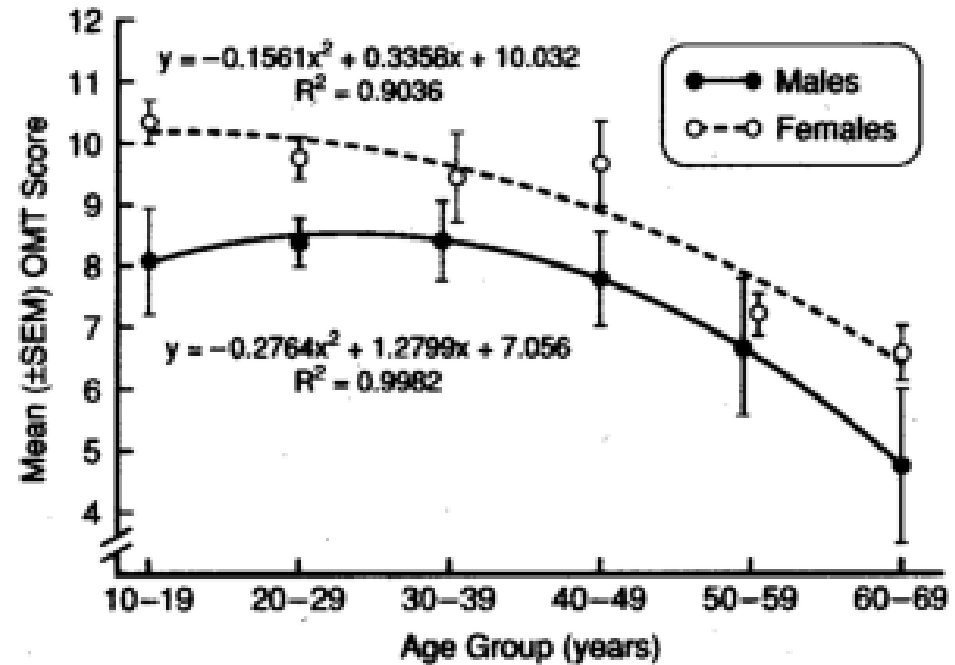
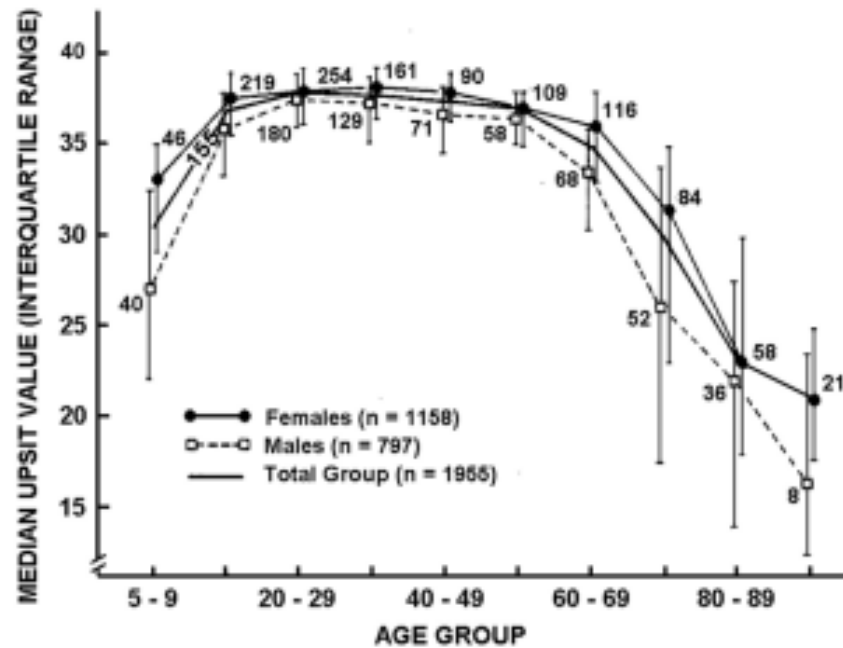
Severity Scale

- Mild: difficulty in swallowing is present but has not led to choking, changes in weight and is not distressing
- Moderate: difficulty in swallowing is present with some choking, weight fluctuation or mild distress
- Marked: obvious difficulty in swallowing is present with choking, weight loss or obvious distress

1. Has he/she had any difficulty in swallowing food? (please circle the best answer for A and then B)
A. Frequency: ----Never---- -Less than weekly- --About once a week-- --Several times a week-- --Daily or continuously--
B. Severity: ----N/A---- ----Mild---- --Moderate-- ----Marked----
2. Has he/she had any difficulty in swallowing liquids? (please circle the best answer for A and then B)
A. Frequency: ----Never---- -Less than weekly- --About once a week-- --Several times a week-- --Daily or continuously--
B. Severity: --N/A-- --Mild-- --Moderate-- --Marked--
3. Has he/she coughed or choked when swallowing? (please circle the best answer for A and then B)
A. Frequency: ----Never---- -Less than weekly- --About once a week-- --Several times a week-- --Daily or continuously--
B. Severity: --N/A-- --Mild-- --Moderate-- --Marked--
4. Has he/she taken a long time to swallow food or liquids? (please circle the best answer for A and then B)
A. Frequency: ----Never---- -Less than weekly- --About once a week-- --Several times a week-- --Daily or continuously--
B. Severity: --N/A-- --Mild-- --Moderate-- --Marked--

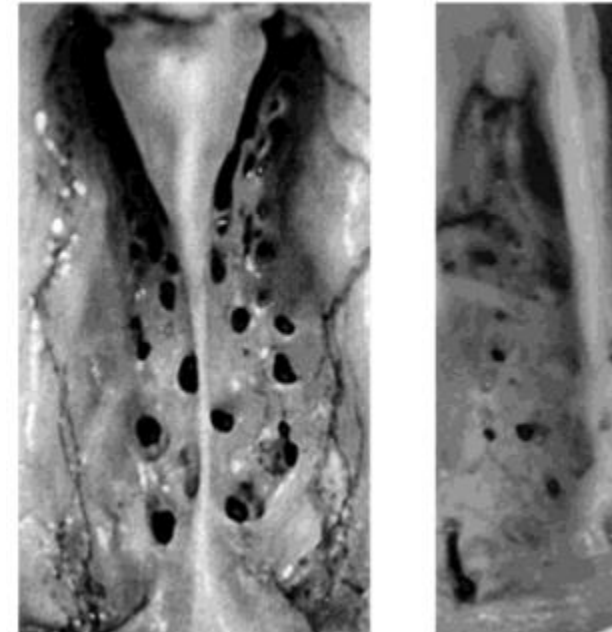
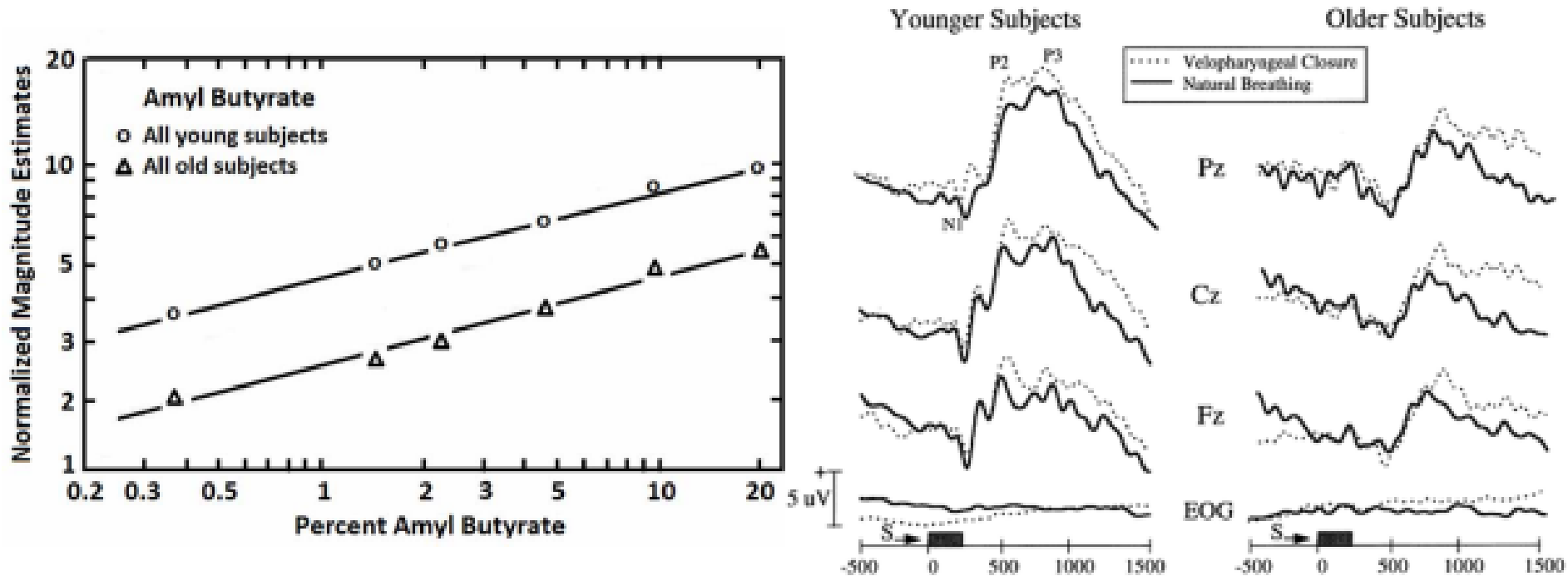
PERCEZIONE SENSORIALE: GUSTO E OLFATTO

- ⊗ Riduzione age-related della capacità di identificare gli odori (*Doty et al. 1984*) e della memoria olfattiva (*Choudhury et al. 2003*)



PERCEZIONE SENSORIALE: GUSTO E OLFATTO

- ⊗ Riduzione della sensibilità agli odori e aumento della soglia sensitiva (*Stevens et al. 1982*) e alterazione dei potenziali olfattivi (*Thensen and Murphy 2001*)

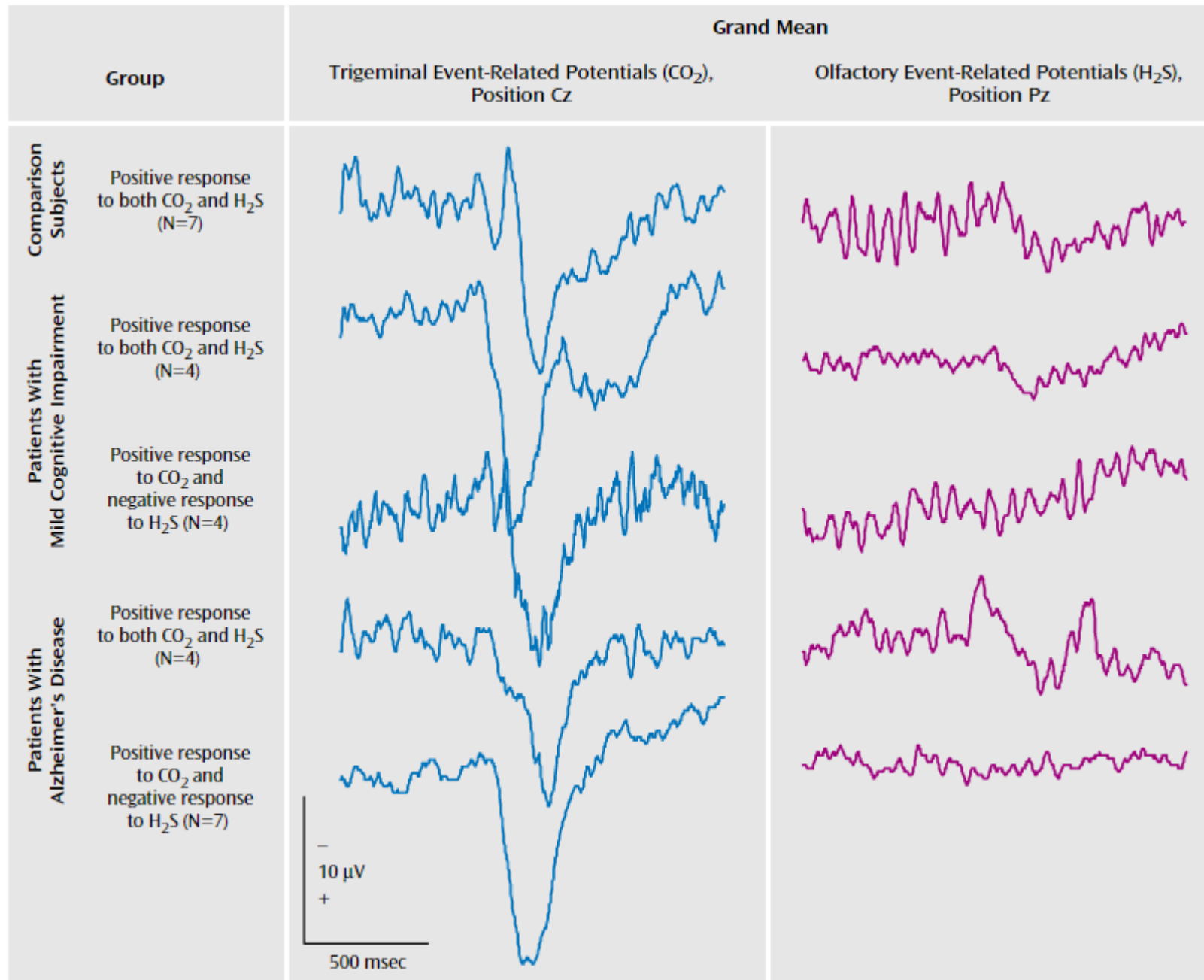


PER

⊗ Alterata iden
Serby et al. 199

⊗ Neurodegen
tubercolo olf
entorinale (H

⊗ Gusto relativ



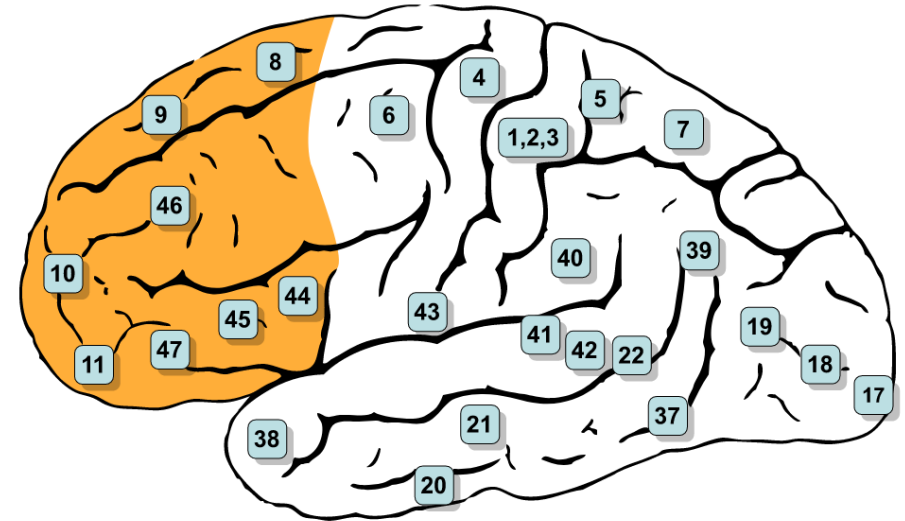
/ et al. 1990;

riore,
teccia

al. 1988)

PROGRAMMAZIONE ED ESECUZIONE

- ⊗ Entrambi i lobi frontali sono coinvolti nella prassia orale, con una indubbia prevalenza per l'emisfero sinistro (*Bizzozero et al. 2000*)
- ⊗ Aree 9, 10, 45 e 46 e insula sono coinvolte nella programmazione e l'attivazione cresce con l'aging e nelle fasi iniziali di CI, con una prevalenza dell'emisfero destro (*Ianessa et al. 2011*)



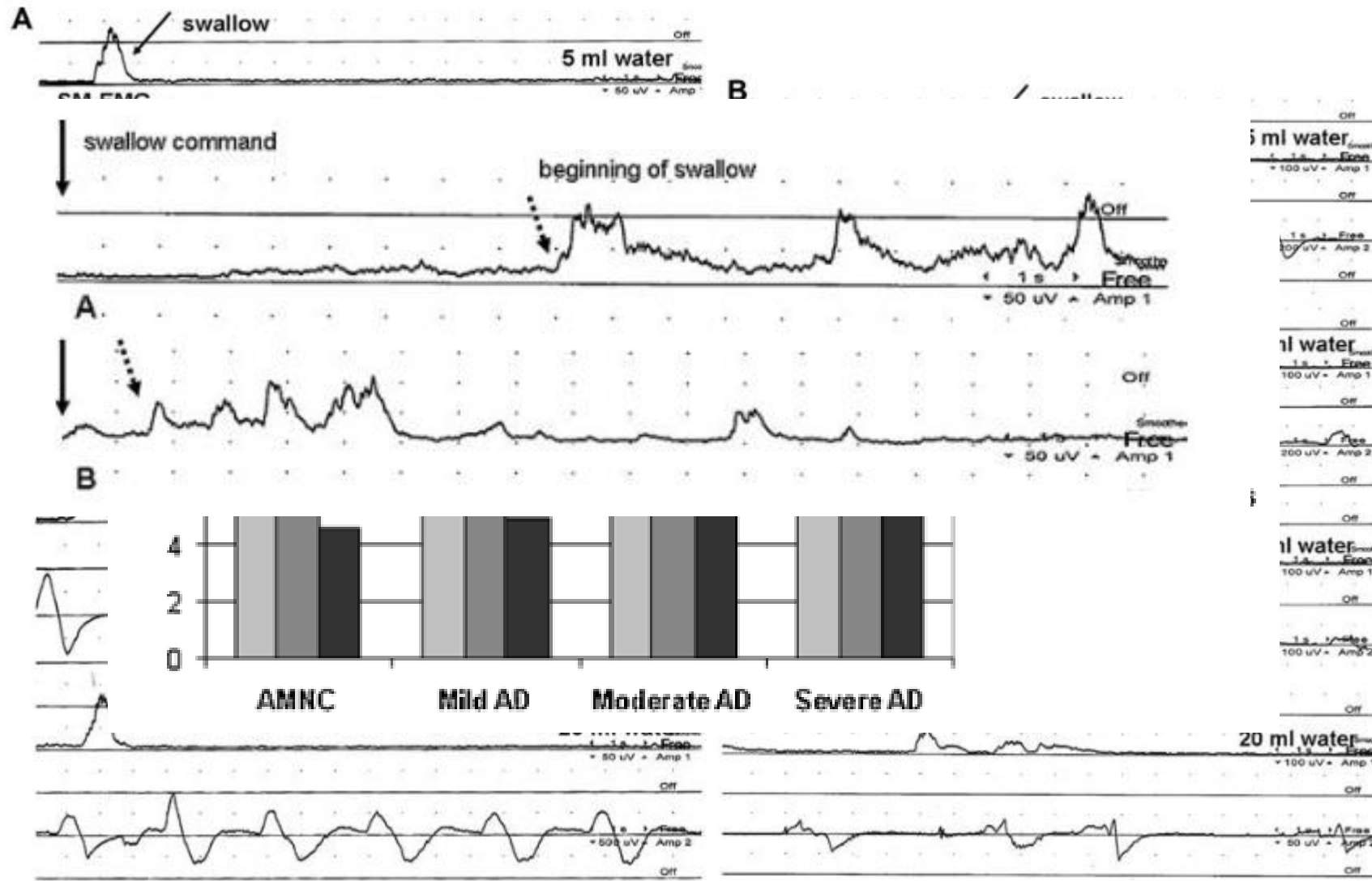
PROGRAMM

Group Comparisons by Swallow Type

⊗ Soggetti con alterazioni temporali

⊗ Soggetti con alterazioni di atti deglutatori (Secil et al. 2016)

⊗ Soggetti con alterazioni faringee, (Secil et al. 2016; Janes et al. 2016)



risultati

o numero di atti deglutatori (Secil et al. 2016)

la fase di deglutazione (Secil et al. 2016)

PROBLEMATICHE

- ⊗ Alterazione del metabolismo energetico (sovrappeso o sottopeso)
- ⊗ Ridotto apporto di micronutrienti con conseguente alterazione di funzione d'organo, incluso il sistema nervosa centrale e periferico (malnutrizione)
- ⊗ Rischio di aspirazione e polmoniti ab ingestis
- ⊗ Aumentato carico assistenziale da parte del caregiver

APPROCCIO MULTIDISCIPLINARE

Neurologo

Otorinolaringoiatra

Logopedista

GRAZIE PER L'ATTENZIONE

