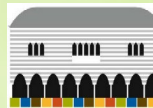


## I DISTURBI DEL COMPORTAMENTO ALIMENTARE NELL'OBSITÀ

ALESSIA MINNITI,

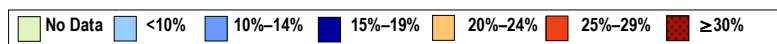
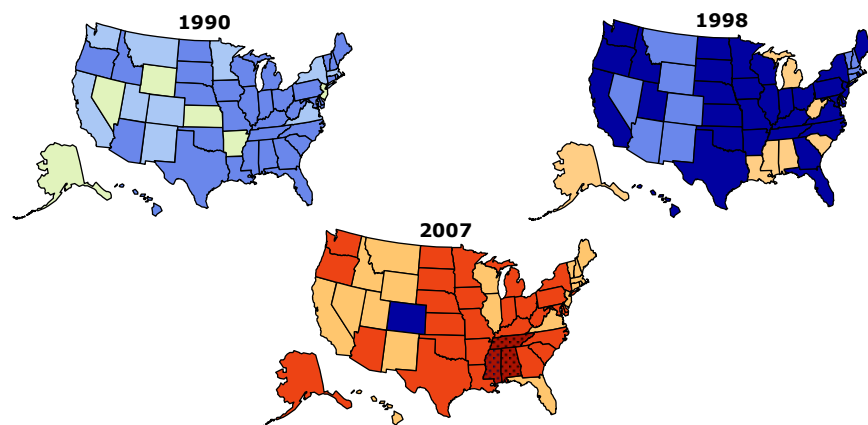
*Unità Funzionale Semplice di Dietetica e Nutrizione Clinica  
Università degli Studi di Verona*



4° Congresso SIO-Triveneto  
Udine, sabato 4 ottobre 2008

### Obesity Trends\* Among U.S. Adults BRFSS, 1990, 1998, 2007

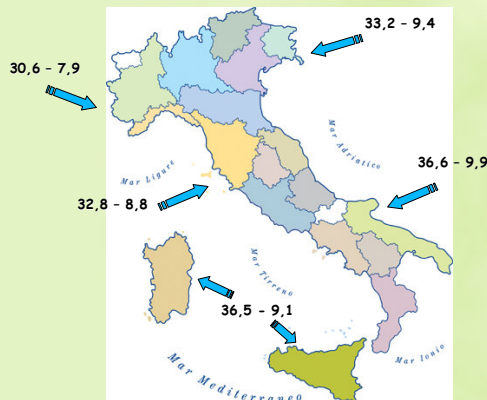
(\*BMI  $\geq 30$ , or about 30 lbs. overweight for 5'4" person)



Source: CDC Behavioral Risk Factor Surveillance System

## OBESITÀ E SOVRAPPESO IN ITALIA

4 milioni di persone adulte sono obese e circa 16 milioni sono in sovrappeso.



Dati ISTAT 2003

Incremento dell'obesità nel periodo 1983-2005



+3,1%



+2,1%



European Journal of Clinical Nutrition (2006) 60, 1174-1179  
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www.nature.com/ejcn

### ORIGINAL ARTICLE

## Overweight and obesity in Italian adults 2004, and an overview of trends since 1983

S Gallus<sup>1</sup>, P Colombo<sup>2</sup>, V Scarpino<sup>2</sup>, P Zuccaro<sup>3</sup>, E Negri<sup>1</sup>, G Apolone<sup>1</sup> and C La Vecchia<sup>1,4</sup>

<sup>1</sup>Istituto di Ricerche Farmacologiche 'Mario Negri', Milan, Italy; <sup>2</sup>Istituto DOXA, Gallup International Association, Milan, Italy; <sup>3</sup>Dipartimento del Farmaco, Istituto Superiore di Sanità, Rome, Italy and <sup>4</sup>Istituto di Statistica Medica e Biometria, Università degli Studi di Milano, Milan, Italy

**Objective:** Overweight has been increasing in several developed countries over the last few decades. No update information on the issue is available for Italy.

**Design and setting:** We conducted a computer assisted personal in-house interview survey in March–April 2004, on a sample of 2932 Italian individuals (1407 men and 1525 women) aged 18 years or over, representative of the general adult Italian population. Information on weight and height was self-reported.

**Results:** Overall, 3.4% of the Italian adult population were underweight ( $<18.5 \text{ kg/m}^2$ ; 0.9% of men and 5.8% of women), 31.3% were overweight ( $25.0\text{--}29.9 \text{ kg/m}^2$ ; 38.4% of men, 24.7% of women) and 8.2% were obese ( $\geq 30 \text{ kg/m}^2$ ; 7.4% of men and 8.0% of women). Overweight or obesity was reported by 14.2% of subjects aged 18–24 years (20.6% of men and 7.6% of women). The highest proportions of overweight and obese subjects were in the 45–64 year age group for men (51.4% overweight, 10.0% obese) and in the  $\geq 65$  year age group for women (38.8% overweight, 13.8% obese). Age- and sex-standardised prevalence of overweight or obesity was 36.0% for more educated subjects, and 54.0% for less educated ones. It was 32.3% in northern, 44.3% in central and 47.0% in southern Italy. Overweight increased from 1983 to the early 1990s, and levelled off thereafter. Prevalence of obesity remained around 8–9% across the last 20 years.

**Conclusions:** Trends of overweight and obesity in Italy are more favourable than in several developed countries. Still, approximately 15 million of Italian adults are overweight and 4 million obese.

European Journal of Clinical Nutrition (2006) 60, 1174–1179. doi:10.1038/sj.ejcn.1602433; published online 26 April 2006

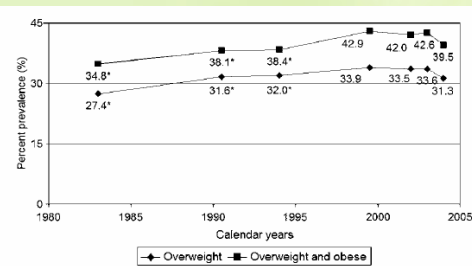
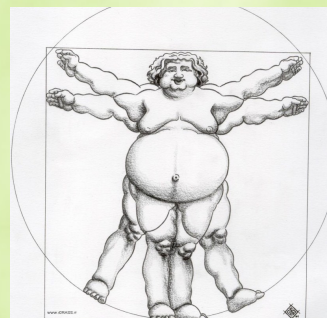
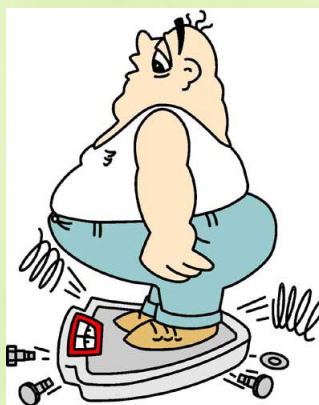


Figure 1 Prevalence (%) of overweight (body mass index, BMI, between 25.0 and 29.9 kg/m<sup>2</sup>) and obesity (BMI ≥ 30.0 kg/m<sup>2</sup>) among adults aged 18 years or over according to seven surveys. Italy, 1983–2004. \*15 years or over.



*L'obesità è una condizione descritta su base morfologica: eccesso di peso corporeo per eccesso di massa grassa.*



## *L'obesità può essere considerata un Disturbo Mentale?*

Una persona sottopeso che continua a mangiare troppo poco e a perdere peso, pur essendo consapevole dei gravi problemi di salute a cui andrà incontro, viene considerata affetta da un disturbo mentale classificato come Anoressia Nervosa.



Similmente, una persona che continua a mangiare troppo e ad aumentare di peso, e che non riesce a modificare il suo comportamento alimentare pur conoscendo i gravi rischi a cui va incontro, può essere considerata affetta da una malattia mentale?

## ICD-10

Obesità = malattia fisica

(Cap IV: Malattie Endocrine Nutrizionali e Metaboliche)

Tuttavia, alcuni casi potrebbero rientrare nella categoria

**F54: FATTORI PSICOLOGICI E COMPORTAMENTALI ASSOCIATI A DISTURBI O MALATTIE CLASSICHE CLASSIFICATE ALTROVE.**

Due condizioni necessarie:

- si ritiene che fattori psicologici e comportamentali abbiano influito sulle manifestazioni o sul decorso di altre malattie fisiche classificate in altri capitoli
- tali fattori psicologici hanno il carattere di disturbi minori, anche se, spesso, di lunga durata, tali da non giustificare l'uso di un'altra diagnosi psichiatrica

Cuzzolaro 1998

## DSM IV-TR

### SEZIONE 316: FATTORI PSICOLOGICI CHE INFLUENZANO UNA CONDIZIONE MEDICA

Tre criteri da soddisfare:

- un disturbo di interesse medico (codificato sull'Asse III del DSM) è presente;
- tale disturbo è influenzato negativamente da fattori psicologici;
- questi fattori sono rappresentati da: disturbi in Asse I, disturbi in Asse II, sintomi psicologici o tratti di personalità che non soddisfano appieno i criteri per un disturbo mentale specifico, comportamenti dannosi alla salute, o reazioni fisiologiche a fattori stressanti ambientali o sociali.

In base a questi criteri diagnostici l'obesità può essere definita come una condizione somatica profondamente influenzata da comportamenti inadeguati.

Cuzzolaro 1998

non è un disturbo psicopatologico

non è un indicatore costante di disturbi psicopatologici

Alcuni obesi soffrono di disturbi mentali e problemi psicologici (DA, immagine corporea, ecc)

Alcuni trattamenti dietetici, farmacologici o chirurgici possono determinare disturbi psicopatologici

**OBESITA'**

Lo stigma sociale favorisce il disagio psicologico

Può essere favorita da psicofarmaci

Può manifestarsi in seguito a eventi traumatici

Cuzzolaro 1998

## Is There a Place for Obesity in DSM-V?

Michael J. Devlin, MD\*

### ABSTRACT

**Objective:** To revisit the merits and problems inherent in considering obesity, or some aspect of obesity, as a mental or behavioral disorder.

**Method:** The author suggests shifting the focus from the state of obesity to the process of nonhomeostatic overeating that results in obesity. Studies are reviewed that pertain to various models of nonnormative overeating including eating disorder models that stress the form of overeating, substance use disorder models focusing on its consequences, and affect regulation or stress response models focusing on its function.

**Results:** Studies focusing on abnormal eating patterns, including binge eating and night eating suggest that such patterns may be related to the development of obesity. While the literature pertaining to substance use and other models of

nonhomeostatic overeating is beginning to mount, current evidence is mostly preliminary and indirect.

**Conclusion:** An attempt to devise diagnostic criteria based on the above models raises multiple difficulties, since the phenomena central to each model are dimensional, common, and variably associated with distress or dysfunction. A detailed understanding of the neurobiological relationships among eating behavior, reward systems, and affect regulation systems will enable a more meaningful consideration of these disorders and will facilitate specific treatment for disorders of overeating. © 2007 by Wiley Periodicals, Inc.

**Keywords:** obesity; diagnosis; classification; binge eating; night eating; emotional eating; addiction

(*Int J Eat Disord* 2007; 40: S83–S88)

## OBESITÀ E DISTURBI DELL'ALIMENTAZIONE

- \* Anoressia Nervosa e Bulimia Nervosa
- \* Disturbi dell'Alimentazione Non Altrimenti Specificati
  - Binge Eating Disorder
  - Night Eating Syndrome
  - Sindromi parziali e stili alimentari atipici

## ANORESSIA NERVOSA E BULIMIA NERVOSA

- ✳ Il fenomeno del cross-over tra DA è molto diffuso: in uno studio di Bulik ('97) il 54% delle donne con AN studiate manifestano un viraggio alla BN

BRITISH JOURNAL OF PSYCHIATRY (2005), 187, 573-578

### Instability of eating disorder diagnoses: prospective study

GABRIELLA MILOS, ANJA SPINDLER, ULRICH SCHNYDER  
and CHRISTOPHER G. FAIRBURN

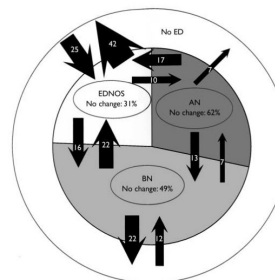


Fig. 1 Changes in DSM-IV eating disorder diagnoses over 30 months (AN, anorexia nervosa; BN, bulimia nervosa; EDNOS, eating disorder not otherwise specified). The figure illustrates changes of diagnoses on instance (rather than person) level. The areas in the pie chart represent the frequencies with which the respective eating disorder diagnoses occurred during all three assessment times; of all such diagnoses 28.4% were AN, 47.3% BN and 24.4% EDNOS. Figures in arrows are percentages based on the number of possible changes for each diagnosis.

## ANORESSIA NERVOSA E BULIMIA NERVOSA

- ✳ Pur raramente, ma si può assistere ad un viraggio da AN o BN all'obesità o viceversa.
- ✳ È importante considerare i rischi collegati alla domanda di dimagrire posta da giovani donne: non sono rari i casi in cui un DA precipita dopo una dieta iniziata in adolescenza per un problema di eccesso ponderale.
- ✳ Alcuni studi in letteratura riportano l'esordio di DA (compresa AN clinica o subclinica) dopo intervento di chirurgia bariatrica.

Research

Open Access

# Psychological and weight-related characteristics of patients with anorexia nervosa-restricting type who later develop bulimia nervosa

Hiroki Nishimura<sup>1</sup>, Gen Komaki<sup>\*1</sup>, Tetsuya Ando<sup>1</sup>, Toshihiro Nakahara<sup>2</sup>, Takakazu Oka<sup>3</sup>, Keisuke Kawai<sup>4</sup>, Toshihiko Nagata<sup>5</sup>, Aya Nishizono<sup>6</sup>, Yuri Okamoto<sup>7</sup>, Kenjiro Okabe<sup>8</sup>, Masanori Koide<sup>9</sup>, Chikara Yamaguchi<sup>10</sup>, Satoshi Saito<sup>11</sup>, Kazuyoshi Ohkuma<sup>12</sup>, Katsutaro Nagata<sup>13</sup>, Tetsuro Naruo<sup>14</sup>, Masato Taki<sup>4</sup>, Nobuo Kiriike<sup>5</sup>, Toshio Ishikawa<sup>15</sup> and Japanese Genetic Research Group for Eating Disorders<sup>1</sup>

## Abstract

**Background:** Patients with anorexia nervosa-restricting type (AN-R) sometimes develop accompanying bulimic symptoms or the full syndrome of bulimia nervosa (BN). If clinicians could predict who might change into the bulimic sub-type or BN, preventative steps could be taken. Therefore, we investigated anthropometric and psychological factors possibly associated with such changes.

BioPsychoSocial Medicine 2008, 2:5

<http://www.bpsmedicine.com/content/2/1/5>

**Method:** All participants were from a study by the Japanese Genetic Research Group for Eating Disorders. Of 80 patients initially diagnosed with AN-R, 22 changed to the AN-Binge Eating/Purging Type (AN-BP) and 14 to BN for some period of time. The remaining 44 patients remained AN-R only from the onset to the investigation period. Variables compared by ANOVA included anthropometric measures, personality traits such as Multiple Perfectionism Scale scores and Temperament and Character Inventory scores, and Beck Depression Inventory-II scores.

**Results:** In comparison with AN-R only patients, those who developed BN had significantly higher current BMI ( $p < 0.05$ ) and maximum BMI in the past ( $p < 0.05$ ). They also scored significantly higher for the low self-esteem characteristic of parental criticism for a child's behavior in self-directedness ( $p < 0.05$ ), which confirms previous reports, but these differences disappeared when the depression score was used as a co-variant. No significant differences were obtained for personality traits or depression among the AN-R only patients irrespective of their duration of illness.

**Conclusions:** The present findings suggest a tendency toward obesity among patients who cross over from AN-R to BN. Low self-directedness and high parental criticism may be associated with the development of BN by patients with AN-R, although the differences may also be associated with depression.

## Anorexia Nervosa Following Gastric Reduction Surgery for Morbid Obesity

Dependency issues were particularly important for both subjects. Subject 1 had an emotionally deprived and abusive childhood with poor attachments and a disrupted sense of self-esteem. Her sense of self was clearly linked to her satisfaction with her body, and she used food to cope with feelings of guilt. She initially overate to "destroy" herself and, after surgery, underate and vomited again to punish herself. Subject 2 again had poor childhood attachments and self-esteem. She initially overate to cope with problems in her home life. Her later restricting behaviors seemed to be an attempt to draw attention away from problems at home, but were also a symptom of her distress.

For Mrs. L., the use of food for emotional comfort was noted prior to surgery. For Mrs. M., a life-long history of being a "worrier" and recent anxiety and depressed mood were noted. In both cases, these problems were not felt to be absolute contraindications to surgery. Schrader et al. (1990) were unable to show a correlation between a variety of psychosocial variables and the amount of weight lost after obesity surgery or with dropping out from follow-up. This report highlights the difficulty of predicting outcome based on psychosocial factors. In retrospect, however, Mrs. L.'s use of food to cope with emotional distress and Mrs. M.'s recent change in mood, together with her emotional decompensation after the surgery, could have suggested a need for closer psychiatric follow-up after surgery. Although a preoperative psychiatric review may not predict surgical outcome, it should be of major benefit in determining which patients are at psychological risk and require closer follow-up.

These case reports suggest that a subgroup of morbidly obese people are at risk of developing anorexia nervosa during weight loss. Dependency issues and the use of food as a distraction for underlying negative affects appear to have been particular risk factors for the reported subjects.

These subjects show that gastric reduction surgery is not free of psychiatric complications. A combination of psychological vulnerability, life stressors, and factors surrounding the surgery itself may contribute to the development of anorexia nervosa. In both subjects, treatment was difficult and multidisciplinary, combining pharmacotherapy, psychotherapy, cognitive therapy, and family therapy.

The two subjects were seen in the course of a 12-month psychiatric liaison with the Obesity Clinic. A wide range of less severe eating disorders, most usually bulimia nervosa, depressive illnesses, and marital difficulties, were also encountered. The authors believe that psychological input makes a significant contribution to the obesity management team, and preoperative psychiatric review may highlight those patients at particular risk of developing an eating disorder.

## Post-Surgical Refusal to Eat: Anorexia Nervosa, Bulimia Nervosa or a New Eating Disorder? A Case Series

Adriano Segal, MD, PhD (Psychiatrist)<sup>1,2</sup>; Debora Kinoshita Kusunoki, MD (Psychiatrist)<sup>1,2</sup>; Maria Aparecida Larino, Nutr (Nutrition Professional)<sup>1,3</sup>

<sup>1</sup>Obesity and Psychiatric Co-Morbidity Outpatient Service, <sup>2</sup>Eating Disorders Section of Brazilian Association for the Study of Obesity, <sup>3</sup>Bulimia and Eating Disorders Outpatient Service, Institute of Psychiatry, Hospital das Clinicas, São Paulo University Medical School, São Paulo, Brazil

Speculation concerning the role of psychiatric disorders in patients undergoing bariatric surgery is abundant in the literature. Psychiatric disorders, however, the success or failure of bariatric surgery have not been adequately described. In this case series, 10 cases of eating disorders in patients undergoing bariatric surgery are being reported. In 5 cases, the criteria for Anorexia Nervosa were not fulfilled in the preoperative period and were not met by the 5 criteria for a new eating disorder, Post-Surgical Eating Avoidance Disorder, PS

Table 9. Post-Surgical Eating Avoidance Disorder (PSEAD)

### Proposed Criteria

- 1) Previous history of morbid obesity followed by bariatric surgery over the last 2 years.
- 2) Higher speed of weight loss than the average usually associated with the technique employed, upon the diagnosis of changes in eating behavior.
- 3) Use of purgative strategies or excessive reduction of food intake, related or not to binge-eating episodes.
- 4) Reaction of extreme anxiety and/or an active negative attitude when nutritional correction is introduced, which can be evidenced by:
  - a. Intense fear of going back to the preoperative weight and/or
  - b. The patient does not accept orientation to interrupt the weight loss and/or
  - c. The patient denies doing something exaggerated that accounts for this loss and/or
  - d. The patient perceives a positive return in the loss of weight, in spite of evidence to the contrary.
- 5) Body image dissatisfaction or distortion.
- 6) Follow-up nutritional tests (such as laboratory tests) alterations that are significant and/or not in line with the surgical technique, maintained for more than 2 months after initial interventions.
- 7) Exclude Anorexia Nervosa and Bulimia Nervosa, according to DSM IV.<sup>23</sup>
- 8) Exclude Simple Phobias (i.e., Food or Choking Phobia) according to DSM IV.<sup>23</sup>
- 9) Exclude organic causes as the most probable factor for excessive weight loss.
- 10) Mandatory criteria: 1, 2 or 3, 4, 6, 7, 8, and 9.

## BINGE EATING DISORDER

- **anni '50:** Hyman Cohen (paziente di Albert Stunkard) definiva così i momenti in cui cedeva alla tentazione di ingozzarsi senza freni, in quelle occasioni percepiva di perdere il controllo e il suo stato di coscienza si alterava.
- Nel **1979 Gerald Russel** ha proposto il termine **Bulimia Nervosa** per differenziare questo disturbo, caratterizzato da abbuffate compulsive e metodi di compenso, dalla Anoressia Nervosa.
- **Spitzer e colleghi (1991)** hanno proposto una nuova categoria diagnostica: il **Binge Eating Disorder**. I pazienti da loro osservati riportavano abbuffate compulsive in assenza di metodi di compenso, la maggior parte di questi pazienti era obesa.

## BINGE EATING DISORDER: criteri diagnostici

Tabella 10.2.3 - BED: criteri diagnostici

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A. Episodi ricorrenti di abbuffate compulsive. Un episodio di abbuffata compulsiva è definito dai due caratteri seguenti (entrambi necessari):                                                                                                                                                                                                                                                                                                                                                                |
| <ul style="list-style-type: none"> <li>- mangiare, in un periodo di tempo circoscritto (per esempio nell'arco di due ore), una quantità di cibo che è indiscutibilmente maggiore di quella che la maggior parte della gente mangerebbe nello stesso periodo di tempo in circostanze simili</li> <li>- un senso di mancanza di controllo sull'atto di mangiare durante l'episodio (per esempio sentire di non poter smettere di mangiare o di non poter controllare cosa o quanto si sta mangiando)</li> </ul> |
| B. Gli episodi di abbuffate compulsive sono associati a tre (o più) dei seguenti caratteri:                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <ul style="list-style-type: none"> <li>- mangiare molto più rapidamente del normale</li> <li>- mangiare fino ad avere una sensazione penosa di troppo pieno</li> <li>- mangiare grandi quantità di cibo pur non sentendo, fisicamente, fame</li> <li>- mangiare in solitudine per l'imbarazzo legato alle quantità di cibo ingerito</li> <li>- provare disgusto di sé, depressione o intensa colpa dopo aver mangiato troppo</li> </ul>                                                                       |
| C. Le abbuffate compulsive suscitano sofferenza e disagio                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| D. Le abbuffate compulsive capitano, in media, almeno due giorni a settimana per almeno sei mesi.                                                                                                                                                                                                                                                                                                                                                                                                             |
| E. Le abbuffate compulsive non sono associate all'uso regolare di comportamenti impropri di compenso (per esempio vomito autoindotto, lassativi, clisteri, diuretici, digiuno, esercizi fisici eccessivi) e non capitano soltanto nel corso di AN o di BN                                                                                                                                                                                                                                                     |



## BINGE EATING DISORDER: prevalenza

Psychotherapy  
and Psychosomatics

### Regular Article

Psychother Psychosom 2007;76:361–368  
DOI: [10.1159/000107564](https://doi.org/10.1159/000107564)

## Epidemiology of Life Events: Life Events and Psychiatric Disorders in the Sesto Fiorentino Study

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Dipartimento di Scienze Neurologiche e Psichiatriche, University of Florence, Firenze, Italy

**SU 2355 SOGGETTI LO 0,32 % HA SOFFERTO DI BED**

## BINGE EATING DISORDER: prevalenza

### Screening for Binge Eating Disorder in Obese Outpatients

V. Ricca, E. Mannucci, S. Moretti, M. Di Bernardo, T. Zucchi, P.L. Cabras, and C.M. Rotella

The prevalence of binge eating disorder (BED) in clinical samples of obese patients is controversial, and sensitive diagnostic protocols for use in routine clinical practice need to be further defined. Three hundred forty-four obese (body mass index [BMI]  $\geq 30$  kg/m<sup>2</sup>) patients were studied with the Structured Clinical Interview for DSM-III-R to investigate the lifetime prevalence of mental disorders. The current prevalence of BED was assessed using DSM-IV criteria. Eating attitudes and behavior were investigated with the Bulimic Investigation Test, Edinburgh (BITE) and the Binge Eating Scale (BES). The Beck Depression Inventory (BDI) and Spielberg's State-Trait Anxiety Inventory (STAI) were also applied. The prevalence of

**BED was 7.5%.** Patients with BED had a higher BMI compared with obese patients without BED. Differences in the lifetime prevalence of mental disorders in patients with and without BED were not statistically significant. Using the BES as a screening instrument for BED with a threshold of 17, the sensitivity was 84.8%, specificity 74.6%, positive predictive value 26.2%, and negative predictive value 97.9%. Using the BITE with a threshold of at least 10, the sensitivity was 91%, specificity 51.4%, positive predictive value 71.8%, and negative predictive value 98.2%. The BITE can be a valid alternative to the BES as a screening method for BED in obese patients.

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*Comprehensive Psychiatry*, Vol. 41, No. 2 (March/April), 2000; pp 111-115

## BINGE EATING DISORDER: prevalenza



ELSEVIER

*Psychiatry Research* 94 (2000) 131-138

PSYCHIATRY  
RESEARCH

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### Binge eating disorder: prevalence and psychopathological features in a clinical sample of obese people in Italy

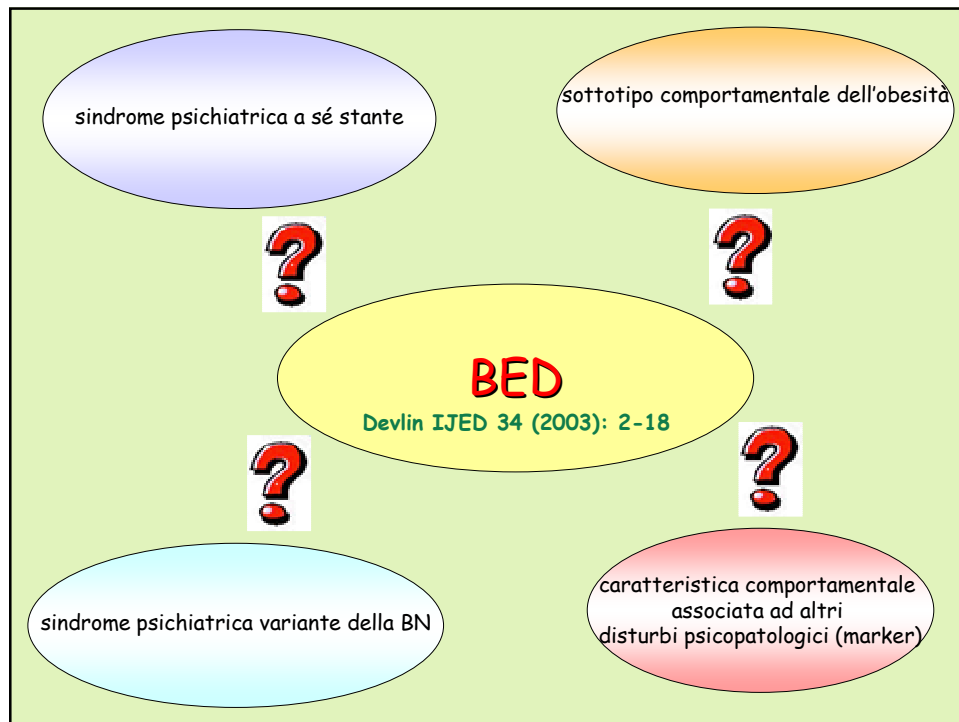
Carla E. Ramacciotti<sup>a,\*</sup>, Elisabetta Coli<sup>a</sup>, Carlo Passaglia<sup>b</sup>,  
Maria Lacorte<sup>b</sup>, Enrica Pea<sup>b</sup>, Liliana Dell'Osso<sup>a</sup>

<sup>a</sup>Department of Psychiatry, Pharmacology, Neurobiology and Biotechnologies, Section of Psychiatry, University of Pisa,  
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Received 12 March 1999; received in revised form 8 September 1999; accepted 22 November 1999

Su 66 pazienti obesi, è stata riscontrata una prevalenza di BED "lifetime" pari al 18,1 % e una presenza del disturbo negli ultimi 6 mesi pari al 12,1 %.



## Binge Eating Disorder: Disorder or Marker?

Albert J. Stunkard\* and Kelly C. Allison

Department of Psychiatry, University of Pennsylvania, Philadelphia, Pennsylvania

Accepted 28 March 2003

**Abstract:** **Objective:** To describe the evidence for the constellation of symptoms known as binge eating disorder (BED) and to evaluate the utility of this diagnosis. **Methods:** Examination of the definition, prevalence, psychiatric comorbidity, and treatment of BED through a selective review of the literature. **Results:** The objective definition of a binge (its size and duration) remains problematic. Persons with BED have extensive comorbid psychopathology. Pharmacologic treatments effectively reduce binge eating, but only somewhat more than placebos, whereas psychotherapeutic treatments reduce binge eating, but do not produce weight loss. Traditional behavioral weight loss programs produce both weight loss and decreases in binge eating. The course of BED is variable and often remits with non-specific attention or during wait-list conditions. **Conclusions:** Although there is consensus on the criteria for BED, its great variability limits the implications that can be drawn from its diagnosis, and it may be most useful as a marker of psychopathology. © 2003 by Wiley Periodicals, Inc. *Int J Eat Disord* 34: S107–S116, 2003

**Key words:** binge eating disorder; comorbidity; psychopathology; pharmacologic treatment

## Should Binge Eating Disorder Be Included in the DSM-V? A Critical Review of the State of the Evidence

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Annu. Rev. Clin. Psychol. 2008.4:305-24

### SUMMARY POINTS

1. Binge eating disorder (BED) was introduced in 1994 in the fourth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV, Am. Psychiatr. Assoc. 1994) as a provisional eating disorder diagnosis. The question of whether BED should be added in the next edition of the DSM has been hotly debated, with some experts expressing support for moving BED from representing an example of an Eating Disorder Not Otherwise Specified to a "named" disorder in its own right and others maintaining that such a designation continues to be premature.
2. Blashfield et al. (1990) proposed that five criteria should be considered when deciding whether to recognize a disorder as a legitimate category of pathology in the DSM. One, there should be ample literature about the proposed syndrome. Two, the diagnostic criteria should be articulated clearly. Three, the proposed syndrome should be differentiated from other (similar) syndromes. Four, evidence should be available regarding the reliability of the diagnosis. And five, evidence should be provided regarding the validity of the syndrome.
3. Although the diagnostic criteria have been clearly and consistently articulated in the literature, they have been the subject of some debate, such as questions about the time-related terms in the criteria, including (a) the amount of time spent binge eating, (b) the occurrence of binges on at least two days per week, and (c) the six-month duration period for the binge-eating pattern.
4. Prevalence estimates for BED are consistently higher than estimates for anorexia nervosa or bulimia nervosa. The gender ratio is far less skewed in BED than in bulimia nervosa, and BED has been shown to affect females representing racial or ethnic minority groups in numbers that are comparable to those that have been reported for white females.
5. Research has shown that individuals with BED differ from individuals with bulimia nervosa in clinical presentation and comorbidity, demographic correlates, and response to treatment. BED is a syndrome distinct from bulimia nervosa in regard to binge characteristics (e.g., caloric intake, types of binge food, levels of restraint) and course and outcome of the two disorders.
6. Poor social adjustment, psychiatric comorbidity, and impaired health and psychosocial functioning are common in individuals with BED. BED is a very stable syndrome, with an average duration of illness of 14.4 years, significantly longer than the duration of anorexia nervosa or bulimia nervosa.
7. Cognitive behavior therapy is the treatment of choice for BED, but there is limited evidence that medication and placebo differentially affect either binge eating or weight loss in patients with BED.
8. Based on an application of Blashfield's five criteria, we conclude that a case can be made for recognizing BED as a formal eating disorder diagnosis in the DSM-V, although further classification studies are needed using wider sets of external validators to examine the clinical utility of newly derived criteria sets to predict course and outcome.

### REVIEW ARTICLE



## The Diagnostic Validity of the Criteria for Binge Eating Disorder

Janet D. Latner, PhD<sup>1\*</sup>  
Courtney Clynne, PhD<sup>2</sup>

### ABSTRACT

**Objective:** This paper considers whether the criteria currently used to classify the diagnosis of binge eating disorder (BED) are valid and appropriate.

**Method:** We review evidence that reflects on the validity of the current criteria for binge eating episodes and BED, using literature retrieved through major psychology and psychiatry search engines (e.g., PsycInfo, PubMed).

**Results:** Evidence from experimental research points to the relative importance of episode frequency, the amount of food consumed at episodes, the subjective sense of loss of control over eating, and several additional criteria associated with binge episodes in BED. Evidence on the differences in psychopathology between

BED and bulimia nervosa and between BED and obesity without binge eating, as related to diagnostic criteria, is reviewed.

**Conclusion:** Although evidence concerning the diagnostic criteria of BED is mixed, broadening certain diagnostic criteria for binge eating episodes and BED might more accurately reflect the research literature and increase the number of individuals eligible for inclusion in treatment programs. © 2007 by Wiley Periodicals, Inc.

**Keywords:** binge eating; binge eating disorder; diagnostic criteria; objective bulimic episodes; subjective bulimic episodes; DSM

(Int J Eat Disord 2008; 41:1-14)

| BED vs Obesità                                                                                                                                                                                                                                                                                                                                                                                                                                    | BED vs BN                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>&gt; preoccupazione per comportamento alimentare e forme corporee</li> <li>&gt; sintomatologia depressiva</li> <li>&gt; livello di comorbidità psichiatrica (disturbi dell'umore e di personalità)</li> <li>&lt; autostima</li> <li>&gt; Disinibizione alimentare</li> <li>&gt; Introito calorico, &gt; quantità di grassi</li> <li>&gt; difficoltà nell'interpretare segnali di fame e sazietà</li> </ul> | <ul style="list-style-type: none"> <li>&lt; preoccupazione per comportamento alimentare e forme corporee e &lt; senso di colpa per il sovrappeso</li> <li>&lt; livello di comorbidità psichiatrica</li> <li>&lt; livello di restrizione alimentare al di fuori delle abbuffate</li> <li>&lt; Introito calorico nelle abbuffate</li> <li>&lt; contenuto di carboidrati e zucchero negli episodi binge</li> <li>&gt; accuratezza nella percezione degli stati interni</li> </ul> |
| Obesità più severa                                                                                                                                                                                                                                                                                                                                                                                                                                | Socialmente + integrati e mantengono                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Inizio del sovrappeso in età inferiore                                                                                                                                                                                                                                                                                                                                                                                                            | + facilmente le relazioni interpersonali                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Inizio precoce e > numerosità dei tentativi dietetici                                                                                                                                                                                                                                                                                                                                                                                             | Migliore opinione di sé                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Dingemans et al., 2002                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

## NIGHT EATING SYNDROME

### storia di un "nuovo" Disturbo dell'Alimentazione

- ✿ **Albert Stunkard** nel **1955** descrisse una categoria particolare di pazienti obesi che presentavano le seguenti caratteristiche: anoressia mattutina, iperfagia serale e disturbi del sonno.
- ✿ **19 versioni** di criteri diagnostici proposte tra il 1955 e il 2005.
- ✿ Nel **1999 Birketvedt** aggiunge gli spuntini durante i risvegli notturni.

## Night Eating Syndrome: una nuova categoria diagnostica?

### Criteri diagnostici provvisori:

- A. Anoressia mattutina (anche se il soggetto mangia a colazione)
- B. Iperfagia serale: almeno il 25% dell'introito calorico giornaliero viene consumato in spuntini dopo cena
- C. Risvegli: almeno una volta a notte per almeno tre notti a settimana
- D. Spuntini notturni frequenti in occasione dei risvegli (consumo di cibi ad elevato valore calorico)
- E. I sintomi durano da almeno tre mesi consecutivi
- F. Non sono soddisfatti i criteri diagnostici per altri DA (AN, BN, BED)

### Prevalenza

Popolazione generale: 1,1%-1,5%  
Pazienti obesi "treatment seeking": 6%-16%  
Pazienti obesi candidati alla chirurgia bariatrica: 8%-42%

### REVIEW



## Should Night Eating Syndrome Be Included in the DSM?

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Debra L. Franko, PhD<sup>2</sup>  
Alexis May, BA<sup>1</sup>  
Emily Ach, BA<sup>1</sup>  
Douglas Thompson, PhD<sup>3</sup>  
Julie M. Hook, MA<sup>1</sup>

### ABSTRACT

**Objective:** This article examines the status of the literature on night-eating syndrome (NES) according to five criteria that have been proposed by Blashfield, Sprock, and Fuller<sup>1</sup> (*Compr Psychiatry* 1990;31:15-19) to determine whether NES warrants inclusion in the psychiatric nosology as a distinct eating disorder.

**Method:** Relevant research papers were identified in Medline and PsychInfo using the search term "night-eating syndrome."

**Results:** None of the five criteria was met. Specifically, at the time of review, there were not yet 25 empirical papers on NES; no commonly accepted definition of or assessment approach to NES has been adopted; the utility and validity

of NES need to be established, and NES needs to be differentiated more clearly from other eating disorder syndromes.

**Conclusion:** This review suggests that the most pressing step toward clarifying the status of NES is to develop a uniform definition of NES. Once accomplished, research can progress to accumulating the necessary evidence to determine whether NES should be included in the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders. © 2006 by Wiley Periodicals, Inc.

**Keywords:** night eating; eating disorders; classification

(*Int J Eat Disord* 2006; 39:544-549)



## ORIGINAL ARTICLE

# Night eating syndrome and nocturnal snacking: association with obesity, binge eating and psychological distress

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**Objective:** Night eating syndrome (NES) is characterized by a time-delayed pattern of eating relative to sleep, where most food is consumed in the evening and night. This study aimed to investigate the clinical significance of NES and nocturnal snacking by exploring the relationship between NES and (1) obesity, (2) binge eating disorder (BED) and (3) psychological distress.

**Subjects:** One hundred and eighty bariatric surgery candidates, 93 members of a non-surgical weight loss support group and 158 general community respondents (81 males/350 females, mean age: 45.8 ± 13.3 years, mean body mass index (BMI): 34.8 ± 10.8 and BMI range: 17.7–66.7).

**Methods:** NES diagnosis required within the previous 3 months: (1) no appetite for breakfast, (2) consumption of ≥ 50% of daily energy after 1900 hours and (3) sleep difficulties ≥ 3 nights/week. Nocturnal snacking (awakening to eat) was recorded. Validated questionnaires assessed BED, symptoms of depression, appearance dissatisfaction (AD) and mental health-related quality of life (MHQoL). NES and binge eating (BE) (≥ 1 episode/week) were confirmed by interview.

**Results:** NES criteria were met by 11.1% of the total cohort. Across all groups, BE ( $P = 0.001$ ), BMI ( $P = 0.003$ ) and male gender ( $P = 0.013$ ) explained 10% of NES variance. Individuals with co-morbid NES and BE reported similarly elevated psychological distress as other binge eaters. NES alone was not associated with psychological distress. Those with NES who consumed nocturnal snacks reported poorer MHQoL ( $P = 0.007$ ) and greater depressive symptoms ( $P = 0.039$ ) and hunger ( $P = 0.013$ ) than others with NES. Low MHQoL ( $P = 0.007$ ) and male gender ( $P = 0.022$ ) explained 27% of the variance in the nocturnal snacking group.

**Discussion:** In this study, NES was positively associated with BMI, BE and male gender. Elevated psychological distress was only apparent in those who consumed nocturnal snacks. Further characterization and understanding of the clinical significance of NES and nocturnal snacking is required.

International Journal of Obesity (2007) 31, 1722–1730; doi:10.1038/sj.ijo.0803664; published online 19 June 2007

Table 1 Descriptive characteristics and comparison of the three original recruitment groups

|                               | Group 1: general community respondents | Group 2: weight loss support group | Group 3: bariatric surgery candidates | P-value*                                                     |
|-------------------------------|----------------------------------------|------------------------------------|---------------------------------------|--------------------------------------------------------------|
| n                             | 158 (36%)                              | 93 (22%)                           | 180 (42%)                             |                                                              |
| Male/female                   | 34/124                                 | 8/85                               | 39/141                                | 0.018                                                        |
| Mean age                      | 41.3 ± 13.5 <sup>a</sup>               | 55.1 ± 12.4 <sup>b</sup>           | 44.8 ± 11.2 <sup>c</sup>              | 0.000 <sup>abc</sup> 0.026 <sup>ac</sup> 0.000 <sup>bc</sup> |
| Mean BMI                      | 24.8 ± 5.1 <sup>a</sup>                | 32.7 ± 7.3 <sup>b</sup>            | 44.5 ± 6.8 <sup>c</sup>               | 0.000 <sup>abc</sup> 0.000 <sup>ac</sup> 0.000 <sup>bc</sup> |
| NES                           | 9 (5.7%)                               | 4 (4.3%)                           | 35 (19.4%)                            | 0.000                                                        |
| NES+snacks <sup>b</sup>       | 2 (1.3%)                               | 1 (1.1%)                           | 13 (7.2%)                             | 0.005                                                        |
| Nocturnal snacks <sup>b</sup> | 9 (5.7%)                               | 5 (5.4%)                           | 44 (24.4%)                            | 0.000                                                        |
| BDI depression score          | 5.5 ± 5.5 <sup>a</sup>                 | 9.4 ± 7.3 <sup>b</sup>             | 16.8 ± 9.0 <sup>c</sup>               | 0.000 <sup>abc</sup> 0.000 <sup>ac</sup> 0.000 <sup>bc</sup> |
| MBSRQ-AD score <sup>b</sup>   | 0.14 ± 1.0 <sup>a</sup>                | 1.0 ± 0.88 <sup>b</sup>            | 1.8 ± 1.0 <sup>c</sup>                | 0.000 <sup>abc</sup> 0.000 <sup>ac</sup> 0.000 <sup>bc</sup> |
| SF-36 MCS                     | 49.7 ± 6.5 <sup>a</sup>                | 49.8 ± 6.9 <sup>b</sup>            | 46.3 ± 6.2 <sup>c</sup>               | NS <sup>abc</sup> 0.000 <sup>ac</sup> 0.001 <sup>bc</sup>    |
| SF-36 PCS                     | 53.2 ± 6.1 <sup>a</sup>                | 46.2 ± 10.9 <sup>b</sup>           | 36.9 ± 9.5 <sup>c</sup>               | 0.000 <sup>abc</sup> 0.000 <sup>ac</sup> 0.000 <sup>bc</sup> |
| TFEQ restraint                | 8.5 ± 4.9 <sup>a</sup>                 | 12.6 ± 3.9 <sup>b</sup>            | 8.2 ± 3.9 <sup>c</sup>                | 0.000 <sup>abc</sup> NS <sup>ac</sup> 0.000 <sup>bc</sup>    |
| TFEQ disinhibition            | 5.7 ± 3.6 <sup>a</sup>                 | 9.0 ± 4.0 <sup>b</sup>             | 11.7 ± 3.3 <sup>c</sup>               | 0.000 <sup>abc</sup> 0.000 <sup>ac</sup> 0.000 <sup>bc</sup> |
| TFEQ hunger                   | 4.4 ± 3.2 <sup>a</sup>                 | 6.0 ± 3.4 <sup>b</sup>             | 8.8 ± 3.6 <sup>c</sup>                | 0.001 <sup>abc</sup> 0.000 <sup>ac</sup> 0.000 <sup>bc</sup> |

Abbreviations: ANOVA, analysis of variance; BDI, Beck Depression Inventory; BMI, body mass index; BE, binge eaters; MCS, mental health component score; NES, night eating syndrome; NS, not significant; PCS, physical component score; SF-36, The Medical Outcomes Trust Short Form-36; TFEQ, three-factor eating questionnaire. Statistical analysis using ANOVA with Tukey post-hoc analysis for continuous variables and presented as mean ± s.d., and  $\chi^2$  for categorical variables and presented as n (% of original recruitment group). \*Paired letters indicate to which variables each P-value belong. <sup>b</sup>Results presented as number of subjects (percentage of each recruitment group). <sup>c</sup>MBSRQ-AD, Multidimensional Body Self Relations Questionnaire – Appearance Dissatisfaction. This score is determined by calculating the difference between the appearance orientation and appearance evaluation subscales.

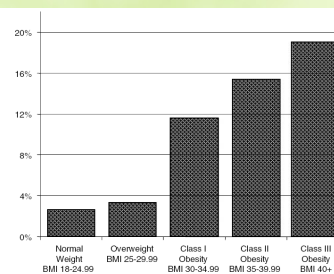


Figure 1 Distribution of all subjects with NES according to BMI category. Across five BMI categories the prevalence of NES increases as BMI increases, and is statistically different between groups ( $P < 0.001$ ). Statistical analysis using  $\chi^2$ .

**Iperfagia prandiale**  
 abitudine di mangiare grandi quantità di cibo ai pasti.  
 Il paziente non ha la sensazione di perdere il controllo  
 nell'atto di mangiare.  
 È lo stile alimentare di molti buongustai, amanti della tavola.

**Piluccare**  
 (grazing, snacking, nibbling; in francese grignotage)  
 spizzicare fuori pasto  
 grazing vuol dire letteralmente "brucare, pascolare".

## Stili alimentari atipici

**Emotional eating**  
 impulso abituale a mangiare qualcosa per placare emozioni  
 sia piacevoli che spiacevoli

**Bramosie selettive**  
 (selective craving, sweet eating, carbohydrate craving)  
 bisogno compulsivo di mangiar carboidrati, in particolare dolci  
 È possibile che il sistema degli oppioidi endogeni sia coinvolto

## Eating Disorder or Disordered Eating? Non-normative Eating Patterns in Obese Individuals

Marian Tanofsky-Kraff\* and Susan Z. Yanovski\*\*

**Table 3.** Research variables characterizing eating disorders and non-normative eating among obese persons

|                                                                                                                                  |
|----------------------------------------------------------------------------------------------------------------------------------|
| <b>Behavioral variables</b>                                                                                                      |
| 1. Amount of food eaten during meals and snacks                                                                                  |
| 2. Context (e.g., alone, at an occasion, restaurant, time of day)                                                                |
| 3. Hunger                                                                                                                        |
| 4. Satiety                                                                                                                       |
| 5. Satiation                                                                                                                     |
| 6. Fullness                                                                                                                      |
| 7. Rate of eating                                                                                                                |
| 8. Physical state (e.g., tired, alert)                                                                                           |
| 9. Energy intake                                                                                                                 |
| 10. Macronutrient composition                                                                                                    |
| 11. Emotional experience surrounding eating by assessing                                                                         |
| a. Cognitive stimuli                                                                                                             |
| b. Affective stimuli                                                                                                             |
| c. Experience or lack of experience of loss of control                                                                           |
| d. Feelings before (e.g., anger, loneliness), during (e.g., "numbing out," shame), and after (e.g., disgust, calmness)           |
| 12. Eating in the absence of hunger                                                                                              |
| 13. Eating following dietary restriction                                                                                         |
| 14. Eating after ingesting a food prohibited on diet                                                                             |
| <b>Assessment of biological variables</b>                                                                                        |
| 1. Neuroendocrine, hormonal, or metabolic (e.g., ghrelin, Peptide YY, leptin, insulin, cholecystokinin)                          |
| 2. Functional neuroimaging (e.g., positron emission tomography scanning, functional magnetic resonance imaging)                  |
| 3. Genetic (e.g., polymorphisms in genes involved in melanocortin signaling)                                                     |
| 4. Gastrointestinal physiology (e.g., stomach capacity; impact of malabsorptive vs. restrictive surgical procedures on appetite) |

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## CONCLUSIONI (1)

- \* L'obesità non figura nelle nomenclature correnti delle malattie mentali. Il dibattito sull'opportunità di inserirla nel DSM V è ancora aperto.
- \* La valutazione psicologico/psichiatrica è necessaria prima di impostare il trattamento, in particolare quando la scelta terapeutica è quella chirurgica, allo scopo di individuare efficacemente i fattori predisponenti un DA.
- \* Le persone con BED e NES rappresentano sottogruppi particolari nella popolazione obesa, spesso caratterizzati da maggiore psicopatologia.

## CONCLUSIONI (2)

- \* Non è stato ancora raggiunto un accordo sulla possibilità di inserire il BED come categoria diagnostica a sé stante. C'è ancora eccessiva confusione sui criteri diagnostici della NES.
- \* Le sindromi parziali, così come gli stili alimentari atipici, non vanno sottovalutati perché coinvolgono un'elevata percentuale di persone obese.

Grazie dell'attenzione!

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