# ORTHOREXIA NERVOSA AND OBSESSIVE COMPULSIVE DISORDER SYMPTOMS OVERLAP IN UNIVERSITY STUDENTS

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## Orthorexia Nervosa (ON)

- Term coined by Dr. Steven Bratman (1997)
- Pathological obsession with healthy eating
- Greek word orthos, meaning "accurate, right, correct, valid"
- "orexsis" which means hunger
- "Righteous Eating": People with orthorexia nervosa remained <u>consumed</u> with what types of food they allow themselves to eat, and <u>feel badly</u> about themselves if they fail to stick to their diet.

# DSM-5 Eating Disorder Diagnostic Categories

- Anorexia Nervosa (AN)
- Bulimia (BN)
- Binge Eating Disorder (BED)
- Avoidant/restrictive food intake disorder (ARFID)
- Other specified feeding or eating disorders
- \*\*\*But what about Orthorexia Nervosa (ON)?

### A Disease Disguised as Virtue

- Obsessive Food Allergy Avoidance
- Quality of the Obsession
  - Absence of moderation
  - Loss of perspective and balance
  - Transfer of too much meaning onto food
  - Escape from life

#### **Hidden Causes of Orthorexia**

- The Search for Safety
- Desire for Complete Control
- Covert Conformity
- Searching for Spiritualty in the Kitchen
- Food Puritanism
- Creating an Identity
- Fear of Other People

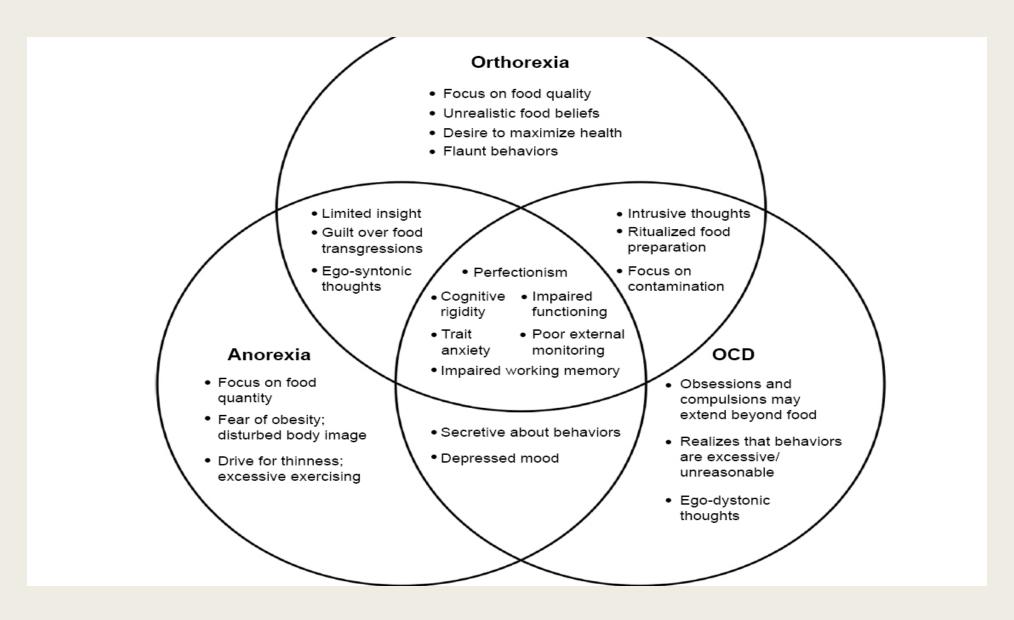
## The Dangers of Orthorexia

- Compulsion begins to override free choice
- Begin to judge everyone else on the basis of diet rather than character and personality
- Spending more hours thinking about food, not simply making dietary choices.

## The Dangers of Orthorexia Cont.

- Priorities upside down
- Obsessive Compulsive Disorder
- Social Isolation
- Disease transmission Children
- Addiction

#### ON associated with other conditions



Source: Koven, N.S. & Abry, A. W. (2015). The clinical basis of orthorexia nervosa: emerging perspectives

## **ON: Is Recovery Possible?**

- Steps
- Hidden agendas
- Eating Healthy without Obsession

## Health Professionals should Intervene when....

- The diet goes past the point of safety
- The diet is making a person miserable
- Someone admits they would like to quit an extreme diet but can't
- It seems a third party is involved (dietary cult)
- The diet seems to have become an emotional illness.

## **Summary**

- The orthorexic fixates on the <u>quality</u> of food, rather than quantity.
- Life becomes about food <u>obsession</u> ( planning, preparing, purchasing, eating meals).
- Compulsion overrides free choice
- Psychological malnutrition impacting <u>quality of life</u>
- Intervention must be done carefully trust is essential

# Orthorexia Nervosa and Obsessive Compulsive Disorder symptoms overlap in university students

#### **Background**

- Orthorexia Nervosa (ON), is a disordered eating pattern that focuses on an obsession with healthy eating.
- Orthorexia Nervosa is not currently considered a diagnostic category in the 5<sup>th</sup> edition of the Diagnostic and Statistical Manual of Mental Illness (DSM-5).
- Current research suggests the orthorexia pathology is multifaceted and associated with obsessive compulsive behaviors.

## **Study Aims**

- To establish demographic characteristics of Orthorexia Nervosa (ON) among university students.
- To explore the relationship between orthorexia features and obsessive-compulsive pathology in male and female students.

#### **Methods**

- Sample: 270 undergraduate university students
- Data collection: Paper self-reported survey Demographic information

ORTO-15 scale

Obsessive-Compulsive Inventory – Revised (OCI-R)

- Data Analysis:
- ✓ Descriptive
- ✓ Correlational analyses (Pearson's correlation)
- ✓ Independent t-test, Chi square, logistic regression

## **Study Survey**

## The study survey included Three main components:

- 1. Demographic survey
- 2. ORTO-15
- 3. Obsessive Compulsive Inventory –Revised

### **Demographic Survey**

- Age
- Gender
- Race
- Marital status
- Body weight (scale)
- Height (report)

- Smoking
- Alcohol consumption
- Exercise
- Food allergy
- Diet/ restricted/ special
- Perception of general health status

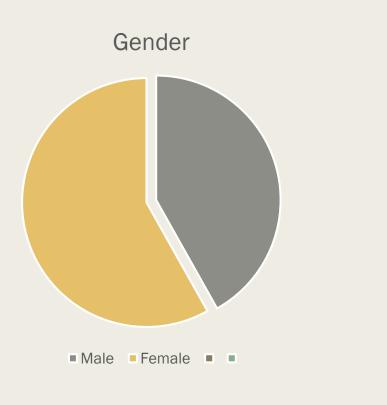
#### **ORTO-15**

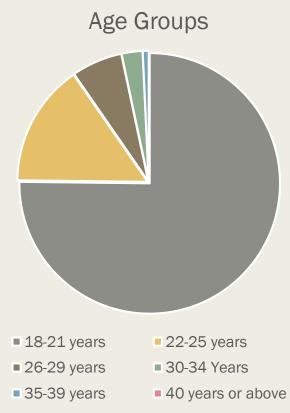
- ORTO-15 determines the prevalence of attitude and behavior related to the consumption of eating healthy food.
- 15- question
- 4-point likert scale [1=never, 4= Always]
- Range [15- 60]
- A cutoff score of less than 40
- ORTO-15 still only partially validated, Cronbach Alpha = 0.82 (Varga et al., 2014)

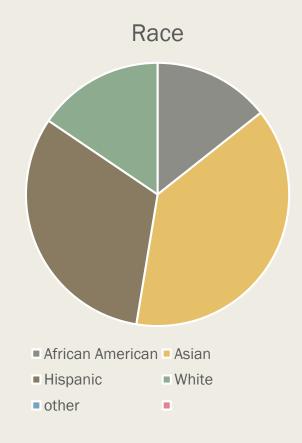
### **Obsessive Compulsive Inventory-Revised**

- OCI-R measures obsessions and compulsions separately, specifically measuring the severity of these symptoms.
- Valid and reliable instrument.
- 18 questions, 5- point likert scale [0= not at all, 4= extremely]
- Six subscales: 3 items each
   [Checking, Hoarding, Neutralizing, Obsessive behaviors, Ordering, Washing]
- Range 0- 72
- A cutoff score of 21 or higher

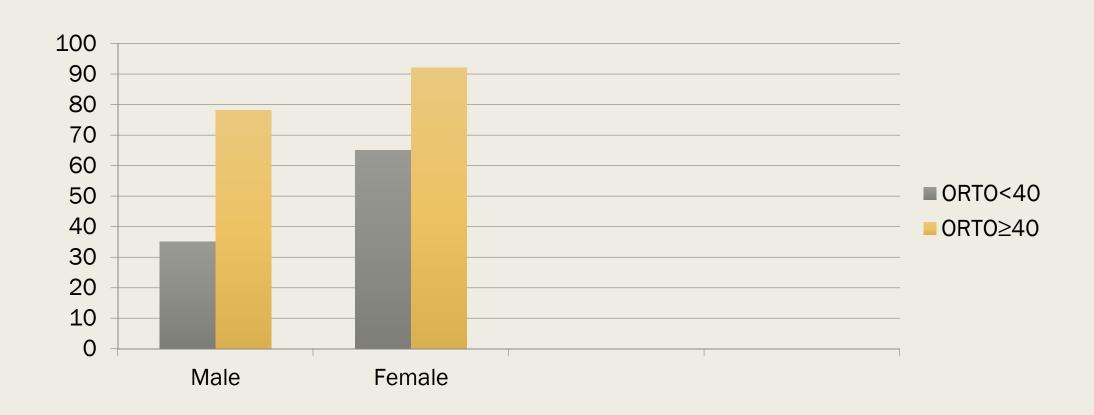
# Results Demographic Information



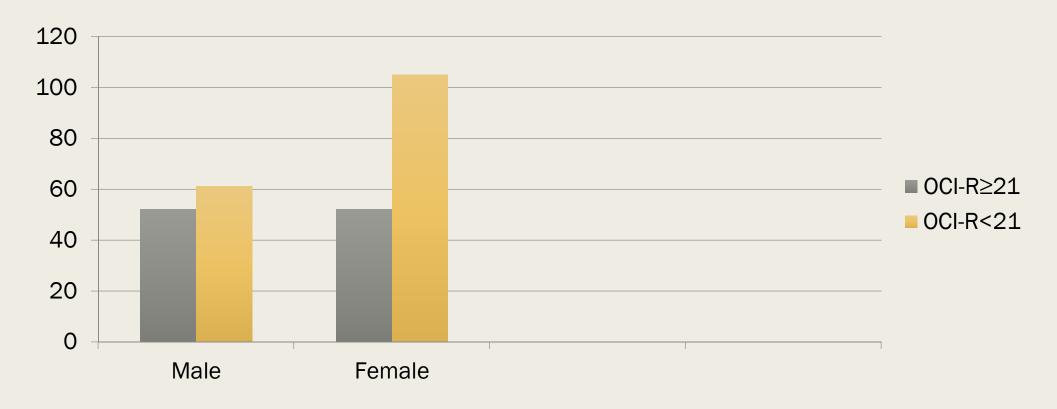




## Results ORTO-15 Scores



# Results OCI-R Scores



Odds Ratio Estimates			
		95% Wald	
Effect	Point Estimate	Confidence Limits	
Male vs Female	1.721	1.047	2.830

#### Results

- BMI mean score N (270) = 24.5
- 100 (37%) participants scored below the cutting score of 40 on ORTO-15. 35 male Vs. 65 female
- 104 (38.5%) participants scored > 21 on OCI-R (52 male, 52 female).
- 58 (21%) participants scored 21 and over on OCI AND below 40 on ORTO.
- The odds of male scoring greater than 21 on the OCI is 172% of that for a female.
- Male respondent score as ORTO (< 40), the odds in favor of him scoring as OCI (>=21) is 372% than that for a respondent that scores >=40 on ORTO.

#### Results...Continued

Significant negative correlations
between ORTO-15 total score
and all OCI-R subscales
This means orthorexic Features
are associated with OC tendencies

= 270			
	ORTO		
ORTO (Total score)	1.00000		
OCI- Checking	-0.31821 <.0001		
OCI- Hoarding	-0.23580 <.0001		
OCI-Neutralizing	-0.31370 <.0001		
OCI- Obsessing	-0.29902 <.0001		
OCI- Ordering	-0.29836 <.0001		
OCI- Washing	-0.29374 <.0001		

Poorson Correlation Coefficients

## Study Implications

- Participants with less orthorexia nervosa related symptoms have fewer tendencies to show Obsessive behavior disorder behaviors.
- Health professionals who encounter patients with orthorexic tendencies should consider screening for obsessive compulsive disorder and treat accordingly
- Further psychometric evaluation studies on ORTO-15 scale are needed to evaluate its validity, reliability, and scoring criteria among different populations.

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