



**OWN YOUR HEALTH**

ST. PAUL'S HOSPITAL  
COMMUNITY FORUMS

## Let's talk about Eating Disorders

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### Epidemiology

- Most common psych disorder in young females
- Lifetime prevalence 0.5-1 % in western society
- 95% female
- Spectrum of illness

### Prognosis

- 40-45% recovery
- 30% partial recovery
- 25% chronic course

### Morbidity

- Psychosocial, behavioural, cultural
- Complication of malnutrition

### Mortality

SMR (standardized mortality rate) 5-15%

- Malnutrition
- Suicide
- Alcohol Abuse

SPH (1981 - 2000): 10%

## Readiness & Harm Reduction Model



## Risk Assessment



Ideal Body Weight (IBW)  $100 \text{ lbs} + 5 \text{ lbs/in}$

Body Mass Index (BMI)



Body Fat Measurement

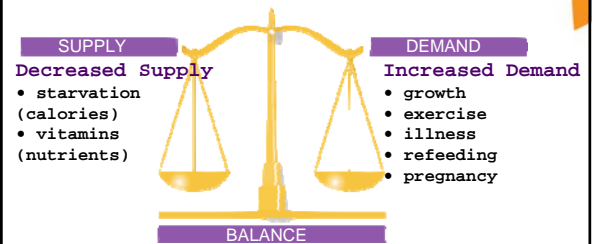


## Nutritional Assessment



- Basal Metabolic Rate (BMR)
- Resting Energy Expenditure (REE)
- Daily Caloric Need

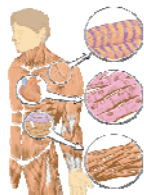
## Energy Needs



## Adaptation to starvation



- Decreased BMR & REE
- Decreased heart rate, blood pressure, body temp
- Hormonal changes
- Preservation:
  - Fat
  - Muscle Protein
  - Visceral Protein



## Role of the Internist



- Refeeding
- Medical complications of the ED
- Medical problems "interacting" with ED
  - chronic
  - acute
- Monitoring of "Chronic" ED patients
  - low weight / BMI
  - harm reduction & readiness

## Refeeding



Supply - Demand problem made worse !!

- Increase metabolism (hypermetabolic state)
- Need more “building blocks”
- Unmask deficiencies
- Reversal of adaptations
- Heart adapts more slowly

## Refeeding



### Problems

- Electrolytes
- Cardiac
- Neurologic
- Hypoglycemia
- Death

Prevention rather than treatment

## Medical Complications



- **Electrolyte (Body Fluids & Salts)**
- Cardiac (Heart)
- Endocrine (Hormone)
- Neuro-Cognitive (Brain)
- Renal (Kidney)
- Gastrointestinal (Gut)
- Hematologic & Immune (Bone Marrow)

## Medical Complications



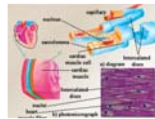
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## Cardiac (Heart)



### Malnutrition & the Heart

- dec size, function
- valve problems
- fibrosis (scarring)
- low heart rate & BP



### Complications

- dizziness & fainting
- congestive heart failure
- arrhythmia / sudden death
- Refeeding



Mostly Reversible

## Medical Complications



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## Endocrine (Hormone)



### Amenorrhea (loss of periods)

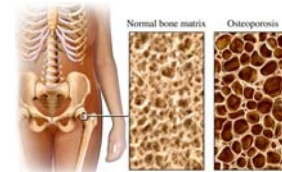
- 95%
- “essential” body fat
- > 1 yr = risk for osteoporosis

## Endocrine (Hormone)



### Osteoporosis

- most significant long term complication
- not completely reversible
- often don't reach “peak bone mass”



## Endocrine (Hormone)



### Hypoglycemia (low blood sugar)

## Medical Complications



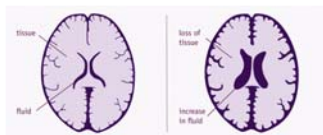
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## Neuro-Cognitive (Brain)



### Malnutrition & the Brain

- atrophy (shrinkage)



## Neuro-Cognitive (Brain)



- Malnutrition & the Brain
  - atrophy (shrinkage)
  - personality changes
  - cognitive slowing / impairment
  - changes in neurotransmitters (brain chemistry)



- Affect ability to work on psychosocial aspects of ED
- Impact on the effect of psych medications
- Mostly reversible ( ? fully ? )

## Medical Complications

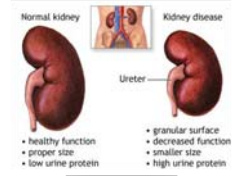


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## Renal (Kidney)



- Malnutrition & the Kidney
  - chronic dehydration
  - electrolyte abnormalities
  - decrease function
- Chronic Renal Failure
- Diuretic Abuse (water pills)
- Not always reversible



## Medical Complications



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## Gastrointestinal (Gut)



- Malnutrition & the Gut
  - muscle wasting
  - decrease function
- Esophagus: reflux (heartburn)
- Stomach: delayed gastric emptying (bloating, fullness)
- Colon: prolonged transit time (constipation)



## Medical Complications



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## Hematologic & Immune (Bone Marrow)



- Anemia (low hemoglobin/red blood cells)
- Leukopenia (low white blood cells)
- Immune dysfunction (risk of infections)



## Role of Internal Medicine



- Multidisciplinary Approach
- ED Ward: Extra Care Program
- Medical Wards: "Medical" Admissions
- ER

## Role of Internal Medicine



- Medical Assessment Clinic
  - pts referred to SPH ED Program
  - Psychiatric, Research, & Medical
- Medical Monitoring Clinic
  - low weight / chronic
  - medical complications of ED
  - medical problems interacting with ED (eg. Diabetes)
  - pregnancy
- Complex Care Clinic
- Outpatient Tube Feeding
- Provincial Advice