

Healthy Lifestyle and Metabolic Factors in Early Psychosis

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Objectives

1. An overview of the factors that increase metabolic risk in early psychosis
2. Treatment and management of risk factors to improve patient outcomes

The two decades of life lost



The two decades of life lost

- Patients with severe mental illness lose about 20 years of their life
- Most of this is due to an increase in the risk of heart disease
- Schizophrenia increases the risk of Type 2 Diabetes by 3 times
- Antipsychotic treatment increases it by a further 3 times

Bobo W JAMA 2013; Rubin D JAMA 2015, Rajkumar et al Am J Psych 2017

Factors related to serious mental illness which increase risk of obesity/diabetes

Mental Illness

Diabetes
Obesity
MetS

Illness biology

Genetic links between SCZ and metabolic problems



Life style factors:

- Poor self care
- High smoking rates
- Inactivity
- Poor dietary habits



Treatments:

- Antipsychotics **
- Antidepressants
- Mood stabilizers

Systems factors

Reduced access to physical care

“Silo working”: Poor co-ordination between health providers

Policy ambiguities

Implications (beyond heart disease)

- Medication compliance
- Self-esteem
- Hospitalization rates
- Quality of life
- Social withdrawal
- Social care costs



De Hert M, 2006; De Hert M 2007; Lyketsos C 2002; McCrone P 2008

Metabolic abnormalities and cognition

- Patients with metabolic syndrome and other weight related problems have worse brain functioning

Summary: objective 1

- Individuals with mental illness are at a higher risk of developing weight and heart disease related problems
- Antipsychotics target some psychotic symptoms, but don't solve all problems
- Metabolic side-effects add to the burden of illness

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Simplified monitoring schedule

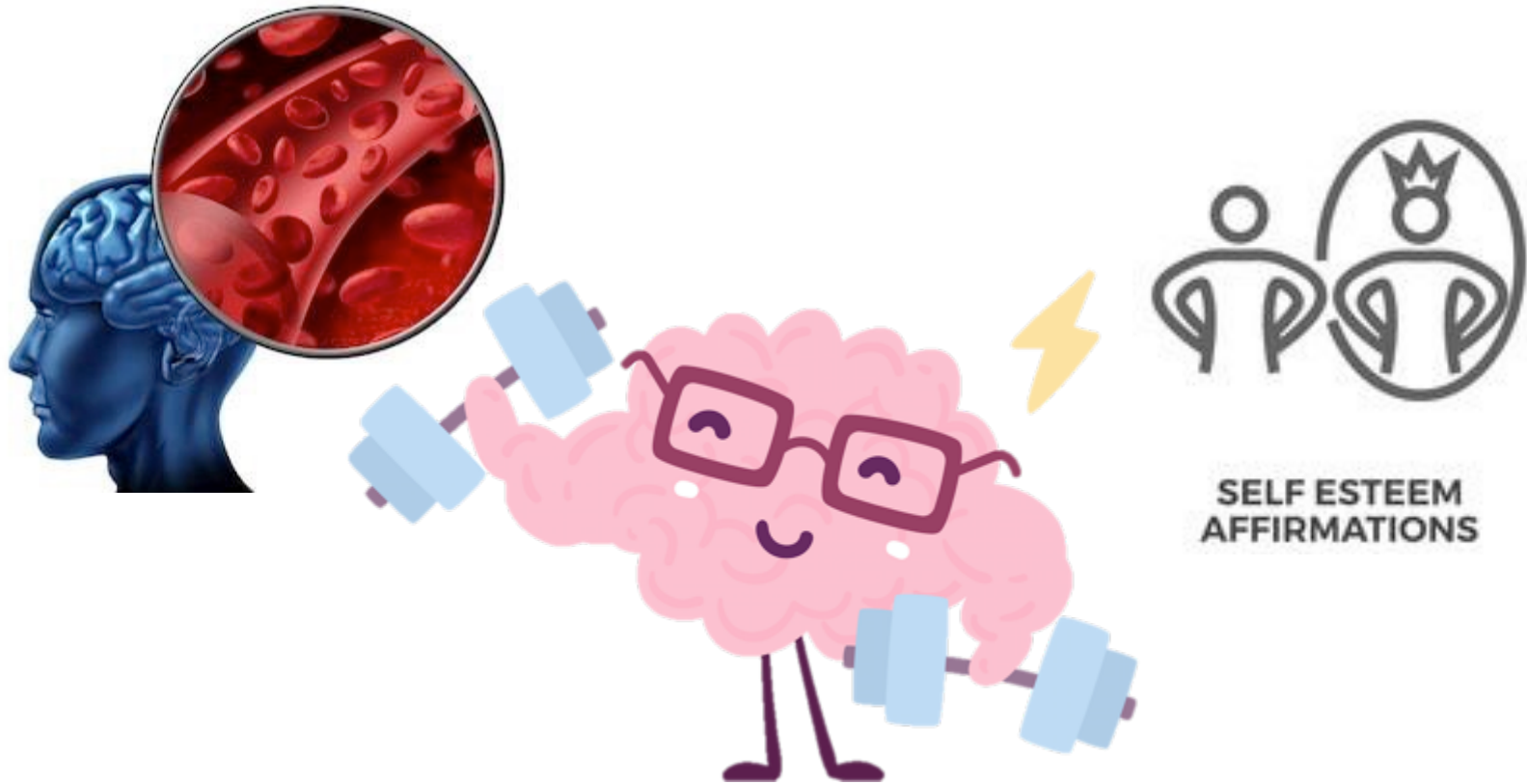
- Weight at every visit/month (ask about appetite)
- Blood pressure and waist circumference at baseline/first feasible opportunity, 3 months after, and yearly thereafter if normal
- Fasting blood work (glucose, insulin, lipids, HbA1c) at baseline/first feasible opportunity, 3 months after, and yearly thereafter if normal
- If abnormal, repeat every 3 months and treat/refer

Interventions



- Diet and exercise intervention should be front-line
- Smoking cessation
- Optimizing medication doses; switching

Exercise



A Walk a Day

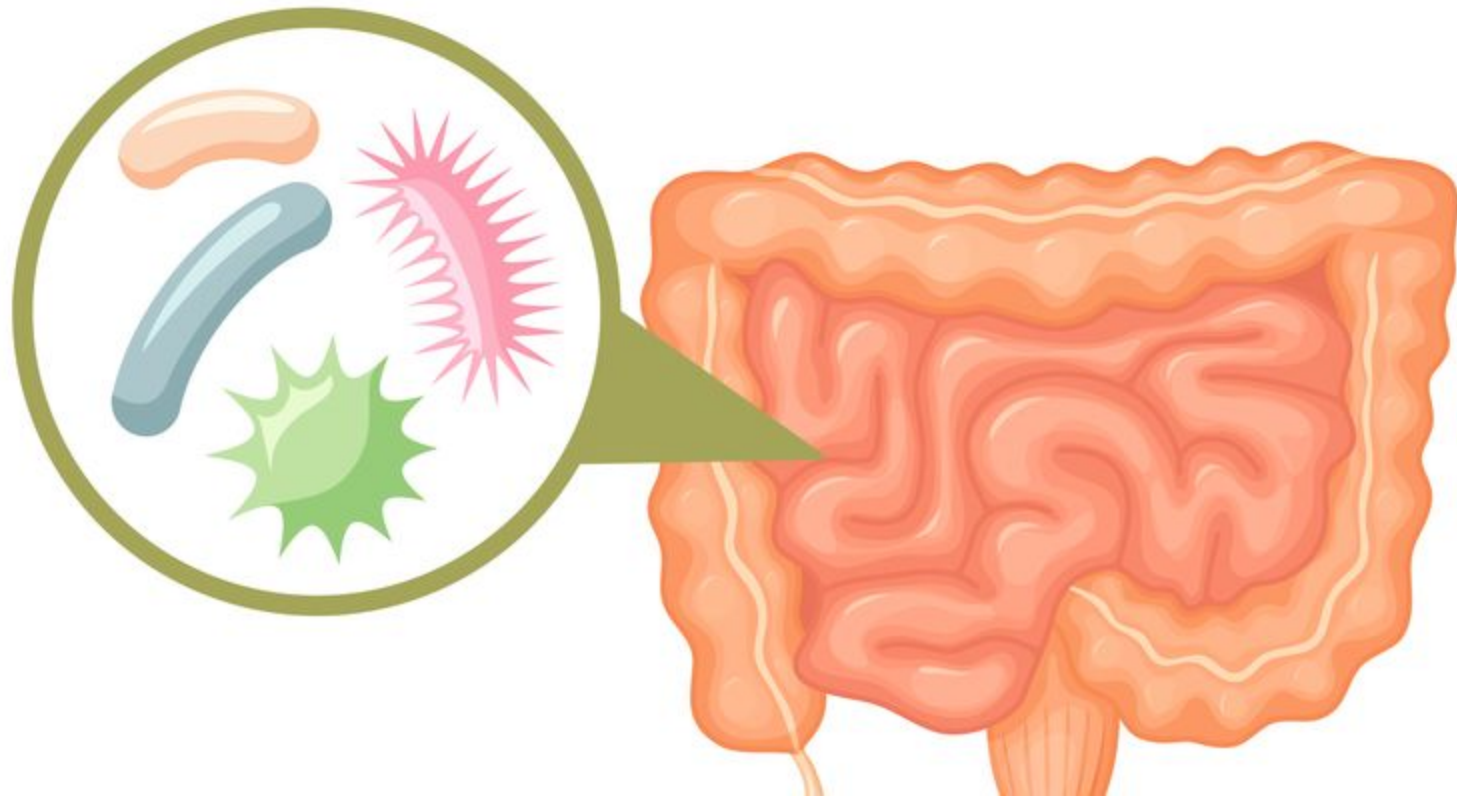


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Nutrition

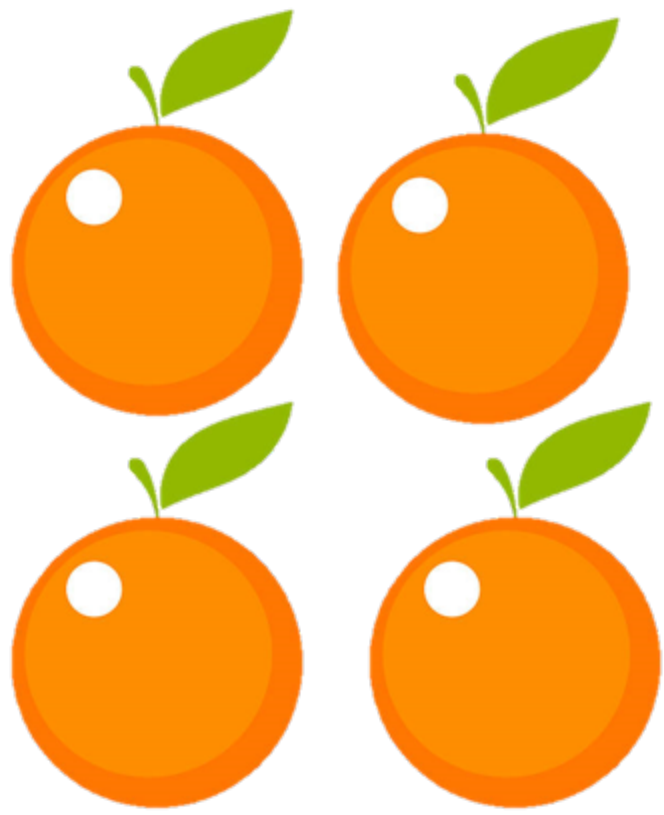


Nutrition



Food → Bacteria → Mind

Sugar: Cut Out the Excess



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Costs of Eating Out vs. Cooking

**Comparison Shopping:
McDonald's for Four**

\$27.89

- 2 Big Macs
- 1 cheeseburger
- 1 6-pc. Chicken M
- 2 medium fries
- 2 small fries
- 2 medium Cokes
- 2 small Cokes

Nutrition facts per person

CALORIES	900 (average)
FAT	37 grams
CARBOHYDRATES	123 grams
PROTEIN	23 grams

Pinto Beans and Rice for Four

\$9.26

A savings of \$18.63, or 67%, over the McDonald's meal.
Prices per item:

Prices per item:
 Rice: 50 cents
 Beans: \$2.00
 Milk: \$1.49
 Bell Peppers: \$3.00
 Onion: 37 cents
 Bacon: 5 cents
 Total: \$9.26

Sources: McDonald's; Key Food grocery, Sunset Park, Brooklyn (meal ingredients);
Self magazine and United States Department of Agriculture (nutrition analysis)



CALORIES	571
-37%	
FAT	15 grams
-59%	
CARBOHYDRATES	83 grams
-33%	
PROTEIN	26 grams
+13%	

BILL MARSH/THE NEW YORK TIMES
PHOTOGRAPH BY TOMY CENY/ALA, THE NEW YORK TIMES

Eating out is about 3 times more expensive per meal!

Be Your Own Chef!

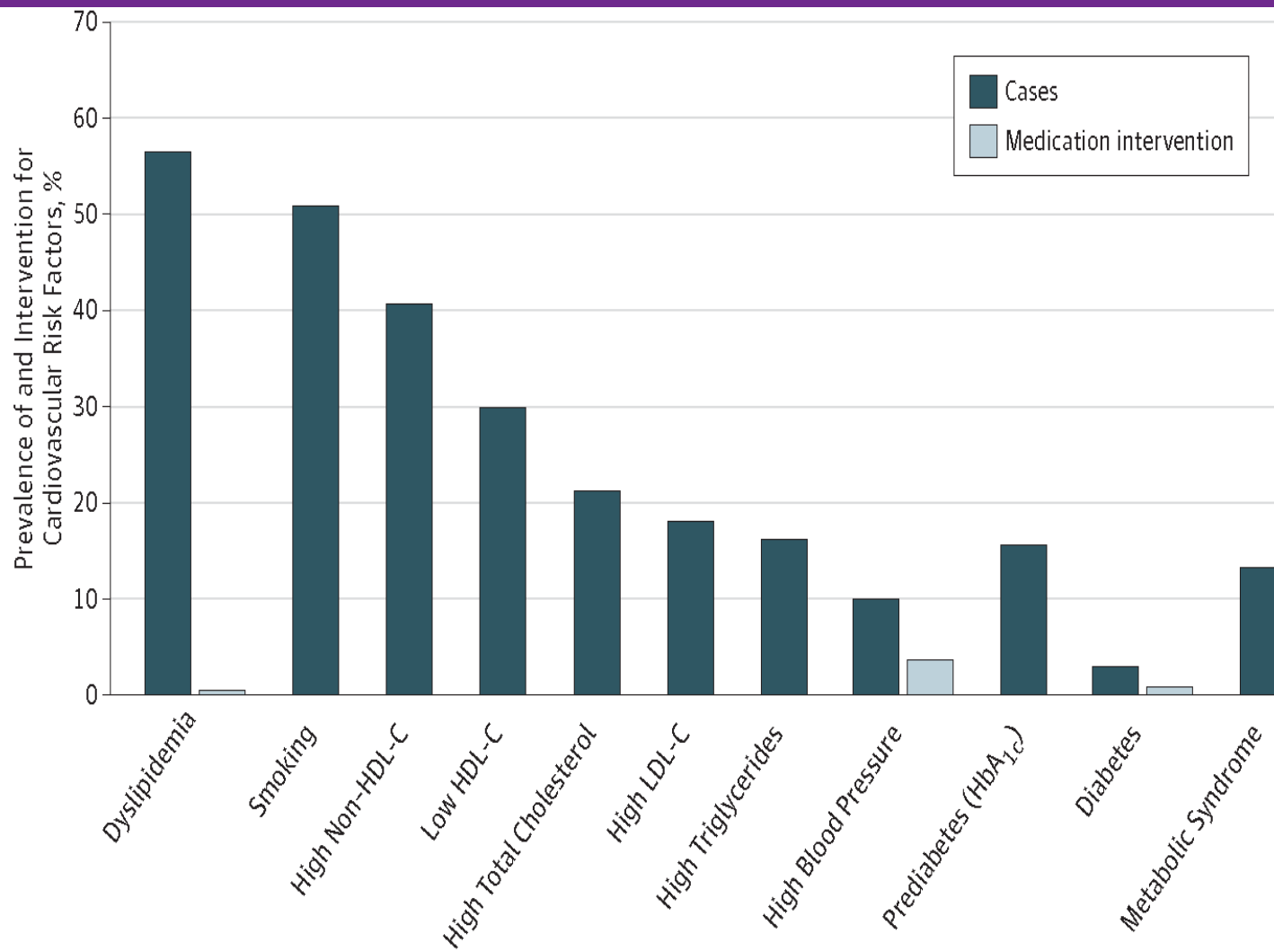


Recipes on a budget: budgebytes.com

Criteria for pharmacological intervention

- BMI > 30
- BMI > 27.5 and one weight related comorbidity (diabetes, hypertension, dyslipidemia)
- Elevated fasting glucose (>5.6 mmol/L)/HbA1c (>5.6%) levels
- Weight gain > 5% from baseline, waist circumference increase > 5cm from baseline; even earlier - 2%!
- Concerns about metabolic side-effects when starting/switching psychotropic medication

Rates of intervention at 34 community sites implementing NAVIGATE



Pharmacological interventions (off-label)

- Metformin
- Topiramate
- Newer agents:
 - GLP-1 RA (liraglutide approved for weight loss)
 - SGLT-2i (approved for diabetes)

Thank you for your attention.

