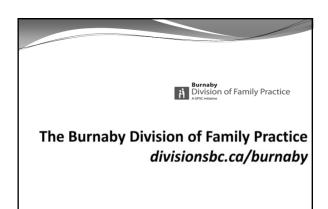


Dr. Davidicus Wong

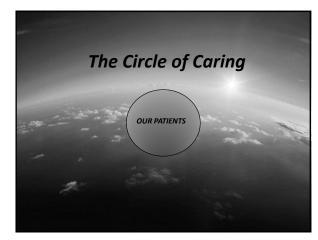
Burnaby
Division of Family Practice

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We care about our patients



7

We care about our community

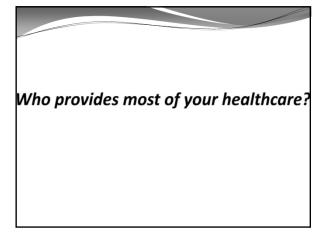
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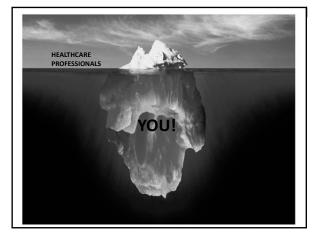
What you should know about DIABETES

- 1. A new way to think about health
- 2. Myths (and facts) about diabetes
- 3. Are you at risk? Should you be tested?
- 4. What people with diabetes should monitor
- 5. The basics of healthy eating for diabetes
- 6. The value of exercise
- 7. Achieving your goals and your positive potential in life











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Healthcare is Self-Care

The best predictor of your future health are the habits you practice today

4 Foundations of Self-Care

The 4 Foundations of Self-Care

What you eat
What you do
How you feel
How you relate

17

1st Foundation of Self-Care

What you eat
What you put in your body
your daily diet, alcohol & drugs
medications

2nd Foundation of Self-Care What you do

Physical Activity & Rest

19

3rd Foundation of Self-Care

How you feel **Emotional Wellbeing** Managing stress Recognizing your emotions Managing them Finding meaning

20

4th Foundation of Self-Care

How you relate **Healthy Relationships** commitment good communication time nurturing unconditional love

The Empowered Patient	
What do you need for good self-care?	
what do you need for good self eare.	
	-
22	
22	
What do you need for good self-care?	
 Knowledge Professional & Peer Support 	
3. Planned care	
23	
23	
What is health?	
vviidt is lieditii:	

What is health?	
The absence of disease?	
•••	
25	
What is health?	
Health is not the absence of illness,	
and healthcare is not merely the treatment of disease.	
treatment of albease.	
26	
26	

Your Positive Potential

I believe that we each have a unique potential in life, and it is our duty to realize that potential and help others achieve theirs.

• •

Your Positive Potential

does not mean perfection.

It is guided by your personal values.

28

What do you need for good self-care?

- 1. Knowledge
- 2. Professional & Peer Support
- 3. Planned care

29

What do you need for good self-care?

- 1. Knowledge
- 2. Professional & Peer Support
- 3. Planned self-care
 - Healthy eating
 - Physical activity
 - Medications
 - Monitoring

	1
Five Myths About Diabetes	
31	
	1
Five Myths About Diabetes	
1. I don't need to worry about it.	
32	<u> </u>
Five Myths About Diabetes 1. I don't need to worry about it.	
2. It's all about sugar.	
22	
33	

Five Myths About Diabetes

- 1. I don't need to worry about it.
- 2. It's all about sugar.
- 3. It comes from being overweight and eating too much sugar.

34

Five Myths About Diabetes

- 1. I don't need to worry about it.
- 2. It's all about sugar.
- 3. It comes from being overweight and eating too much sugar.
- 4. All people with diabetes need to take insulin and check their blood sugars throughout the day.

35

Five Myths About Diabetes

- 1. I don't need to worry about it.
- 2. It's all about sugar.
- 3. It comes from being overweight and eating too much sugar.
- 4. All people with diabetes need insulin and check their blood sugars throughout the day.
- 5. Everyone with diabetes gets complications.

	1
Myth #1	
I don't need to worry about it.	
37	
Myth #1 I don't need to worry about it.	
Diabetes is common:	
1 in 11 adults over 20.	
The incidence will increase as we age, become less active and gain weight.	
become less active and gain weight.	
	-
38	
	1
Myth #2	
It's all about sugar.	
	-
39	
3 9	

Diabetes is a problem of metabolism – how the body converts	
food into energy.	
40	
	•
Glucose is a source of energy for every cell.	
Diabetes can affect every organ system,	
including the circulatory and nervous systems.	
41	
41	
	1
Poorly controlled diabetes can cause heart attacks, strokes, kidney failure,	
amputations and blindness.	
42	

Myth #3	
It comes from being overweight and	
eating too much sugar.	
cuting too much sugui.	
43	
	1
There are 2 types of diabetes:	
There are 2 types of anabetes.	
Type I: insulin-dependent	
The pancreas no longer produces	
insulin. Insulin injections or infusions are	
needed.	
necucu.	-
44	
Type II diabetes: insulin-resistant	
• 90% of diabetes	
 hereditary 	
 cells become resistant to the effects 	
of the body's own insulin	
hecome alucose intolerant	

carbohydrates (sugars, starches) cause a greater rise in blood sugars

	•
Myth #4	
All people with diabetes need to take	
insulin and check their blood sugars throughout the day.	
46	
With type I diabetes, there is insufficient	
natural insulin – extra insulin is required	
and blood sugars have to be carefully monitored to avoid high and low blood	
sugars.	
47	
With type II diabetes, most do not need insulin with the onset of the condition	
so they usually do not need frequent	
glucose testing throughout the day.	
	1

Regular exercise (e.g. 30 minutes each day) and more frequent regular meals	
with low glycemic index foods are essential.	
49	
	1
There are a variety of oral medications that improve glucose intolerance and	
lower blood sugars with type II diabetes.	
If sugars continue to rise, insulin may be needed.	
50	
50	
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Myth #5 Everyone with diabetes gets complications.	
Everyone with diabetes gets complications.	

With the careful self-management of diabetes, most of the complications of diabetes can be avoided.

Professional support and education can enable individuals to be effective managers of their own health.

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The Classical Symptoms of Diabetes

1. Unexplained weight changes

53

The Classical Symptoms of Diabetes

- 1. Unexplained weight changes
- 2. Polyphagia: excessive hunger



The Classical Symptoms of Diabetes

- 1. Unexplained weight changes
- 2. Polyphagia: excessive hunger
- 3. Polydipsia: excessive thirst

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The Classical Symptoms of Diabetes

- 1. Unexplained weight changes
- 2. Polyphagia: excessive hunger
- 3. Polydipsia: excessive thirst
- 4. Polyuria: excessive urination

58



59

The Classical Symptoms of Diabetes

- 1. Unexplained weight changes
- 2. Polyphagia: excessive hunger
- 3. Polydipsia: excessive thirst
- 4. Polyuria: excessive urination

The Classical Symptoms of Diabetes

Most new cases of diabetes are diagnosed before these dramatic symptoms appear.

61

Are you at risk for diabetes?

• Family history of diabetes

62

Are you at risk for diabetes?

- Family history of diabetes
- History of diabetes in pregnancy, polycystic ovary syndrome, metabolic syndrome (high sugars, BP, abnormal cholesterol, triglycerides, abdominal fat)

Are you at risk for diabetes?

- Family history of diabetes
- History of diabetes in pregnancy, polycystic ovary syndrome
- Aboriginal, Hispanic, South Asian, Asian or African descent

64

Are you at risk for diabetes?

- Family history of diabetes
- History of diabetes in pregnancy, polycystic ovary syndrome
- Aboriginal, Hispanic, South Asian, Asian or African descent
- Overweight
- Sedentary

65

Are you at risk for diabetes?

- Family history of diabetes
- History of diabetes in pregnancy, polycystic ovary syndrome
- Aboriginal, Hispanic, South Asian, Asian or African descent
- Overweight
- Sedentary
- High BP, high cholesterol
- · Over 40 years old

If you think you might be at risk, ask your doctor

or take the Canadian Diabetes Risk Questionnaire (CANRISK) www.diabetes.ca/take-the-test

67

When to test for diabetes

The CDA Clinical Practice Guidelines recommends screening every 3 years in individuals over 40 years old or at high risk using a risk calculator (i.e. CANRISK)

68

How do you test for diabetes?

- 1. Hemoglobin a1c
- 2. Fasting glucose
- 3. Glucose Tolerance Test

. . .

Confirming diabetes

- 1. Hemoglobin a1c over 6.5%
- 2. Fasting glucose over 7.0 mmol/L
- 3. 75 gm Glucose Tolerance Test fasting glucose over 7.0 mmol/L OR glucose over 11.1 mmol/L 2 hrs later

70

Confirming diabetes

- 1. Hemoglobin a1c over 6.5%
- 2. Fasting glucose over 7.0 mmol/L
- 3. 75 gm Glucose Tolerance Test fasting glucose over 7.0 mmol/L OR glucose over 11.1 mmol/L 2 hrs later

71

Prevention

- 1. Maintain a healthy weight
- 2. Reduce abdominal fat
- 3. Eat well: smaller more frequent meals, attending to both glycemic index and appropriate portions
- 4. Exercise

Know Your Numbers

What everyone with diabetes needs to know about their lab tests.

73

Know Your Numbers

- 1. Hemoglobin a1c
- 2. LDL cholesterol
- 3. HDL cholesterol
- 4. Total cholesterol/HDL ratio
- 5. Microalbumin
- 6. Blood Pressure
- 7. Estimated GFR

74

Hemoglobin a1c

- Reflects the "average glucose level" over the past 2 to 3 months
- Does not require fasting
- Goal: less than 7.0%

Hemoglobin a1c

Note: the a1c is not equivalent to glucose levels in mmol/L

Hb a1c of 6.5% = mean glucose of 7.2 mmol/L Hb a1c 7.0% = mean glucose of 8.1 mmol/L Hb a1c of 7.5% = mean glucose of 9.1 mmol/L Hb a1c of 8.0% = mean glucose of 10.0 mmol/L Hb a1c of 10.0% = mean glucose of 13.6 mmol/L

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Hemoglobin a1c

An optimal Hb a1c of under 7.0% usually corresponds to fasting/before meal glucose levels under 7.0 mmol/L and 2 hour after meal glucose levels under 10.0 mmol/L.

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Optimal blood sugars

Under 7.0 mmol/L before meals (i.e. breakfast, lunch and dinner)

Under 10.0 mmol/L 2 hours after meals

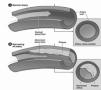
*only if this can be safely achieved without significant risk of hypoglycemia

LDL cholesterol

- The "bad" cholesterol
- Correlated with plaque clogging the arteries supplying the heart, brain,

kidneys and extremities

• Goal: under 2.0 mmol/L



79

HDL cholesterol

- The "good" cholesterol
- Reduces plaque in your arteries
- Raises by fish, exercise, (alcohol)
- Goal: over 0.9 mmol/L in men

over 1.1 mmol/l in women



80

Total cholesterol/HDL Ratio

- Goal: less than 4.0
- A measure of cardiovascular risk

Microalbumin (ACR)

- A test for small amounts of protein in the urine
- Associated with potential early kidney (or microvascular) disease



82

Blood Pressure

- A separate risk factor for vascular disease
- Goal: less than 130/80



83

Estimated GFR

- A blood test ordered as "creatinine"
- A measure of kidney function
- Normal: over 60

What other checks are important for diabetes?

- Complete physical exam (at least every 2 years) to detect early complications
- 2. Foot exam by a physician every year Check your own feet every day!
- 3. Eye examination (every 1 to 2 years) to assess the retinal blood vessels

85

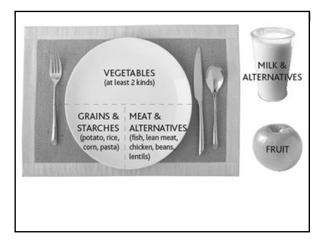
What and how to eat for diabetes

- Don't skip breakfast or eat one big meal at night!
 - Frequent, smaller meals keep glucose levels more even
- 2. Healthy portion sizes
- 3. Attend to the Glycemic Index (G.I.)

86

Healthy Portions

- 1. Half the plate: vegetables
- One quarter: starches (rice, potatoes, pasta) note the glycemic index
- 3. One quarter: protein (lean meat, beans) mind your cholesterol
- 4. One portion of fruit one apple, ½ cup berries
- 5. Avoid sugar-containing drinks

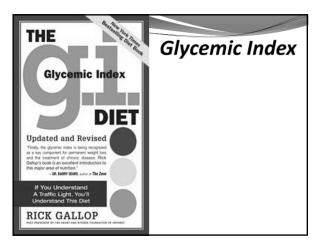


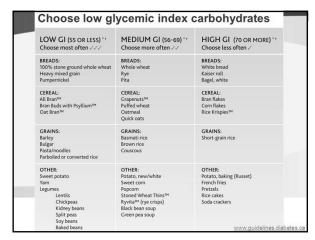
Glycemic Index

The ability of a food to raise your blood sugar. We should consume low GI foods in preference to high GI foods.

http://www.diabetes.ca/diabetes-and-you/healthy-living-resources/diet-nutrition/the-alvcemic-index

89





The Importance of Physical Activity

Some physical activity after each meal will reduce after meal blood sugars

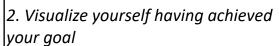
Guideline recommendation: 150 minutes exercise/week or 30 minutes/day

92

Keys to achieving your goals

1. Choose wisely
A goal that matters to you





The Power of Attraction Reprogramming your subconscious Priming the pump for success

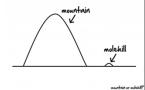


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3. Break it down

From supersized into manageable morsels

You'll gain confidence with early successes.



95

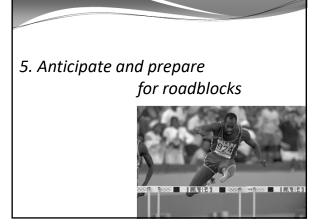




SMARTEST goals

Specific-What will you do? Where?
Measurable-How much? How long?
Achievable-realistic and do-able
Relevant-important to you and your health
Time Frame-When will you start?
When will you finish?
Evaluate-How did you do? What did you learn?
Stepping Forward-What will you do next?
What will you do differently?
Together-Who will work with you? Who will you share with?

97



98



Your	Posi	itive	Pote	ntial
<i>i</i> Oui	ı vəi		·	IICIMI

I believe that we each have a unique potential in life, and it is our duty to realize that potential and help others achieve theirs.

• • •

100

Our Positive Potential

With knowledge, engagement and support, we can manage chronic health conditions and live well.

101

The Most Common Chronic Condition

Everyone in this room has the same chronic condition.

. . .

The l	Vlost	Con	mon
Chro	onic (Cond	ition

It is incurable,

. . .

103

The Most Common Chronic Condition

It is incurable, it is sexually transmitted,

. . .

104

The Most Common Chronic Condition

It is incurable, it is sexually transmitted, and it has a 100% mortality

. . .

The Most Common Chronic Condition

That chronic condition is LIFE.

. .

106

The Most Common Chronic Condition

That chronic condition is LIFE.

Let's make the most of it!

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