Lesson 1
The physiology of IR and DMII: what you need to know

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#### Preamble

- None of the information provided in this or other lessons of the DMII Masterclass is medical advice, it is for educational purposes only
- Discuss any and all lifestyle changes you wish to implement with your doctor/PA/NP, since they are familiar with your complete health history and have a record of your medications and supplements

#### Spectrum of IR

Insulin Sensitive Mild Insulin Resistance Moderate Insulin Resistance

Prediabetes

DMII

Insulin-Dependent DMII

## Physiology of IR

Trigger

Blood sugar 🕎

Pancreas secretes insulin

Insulin directs energy into cells for **storage** 

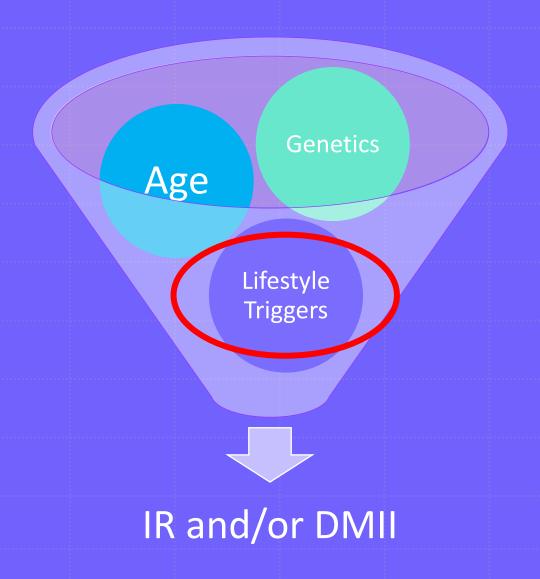
Trigger

Blood sugar  $\Psi$ 

Pancreas secretes glucagon

Glucagon directs energy out of the cells for **utilization** 

#### Factors Contributing to IR and DMII



## Lifestyle Includes

Diet – how often we eat Diet – what we eat

Sleep

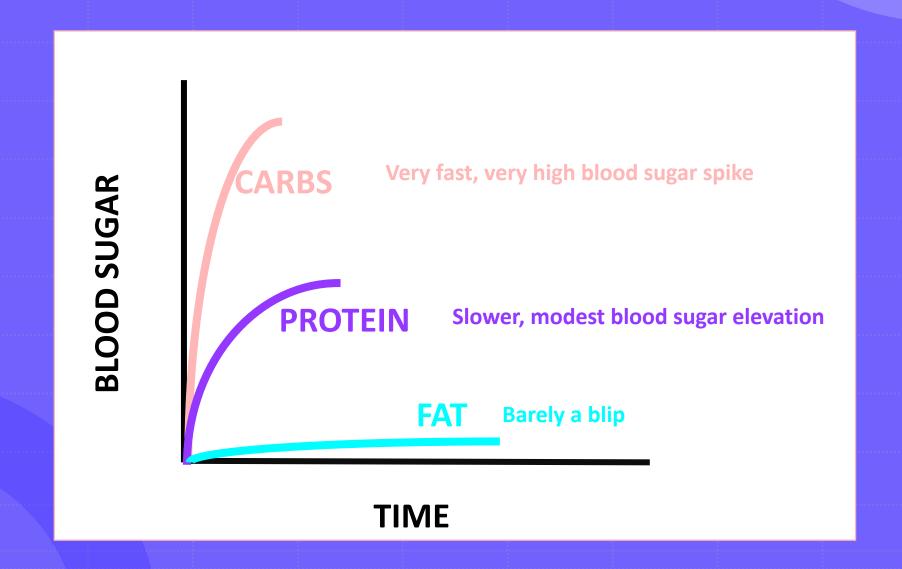
**Stress** 

**Physical Activity** 

Pharmaceuticals
/ Supplements

Tobacco

## Food & Blood Sugar







## Fixing the Problem

Trigger

Blood sugar 🛧

Pancreas secretes insulin

Insulin directs energy into cells for **storage** 

Trigger

Blood sugar **↓** 

Pancreas secretes glucagon

Glucagon directs energy out of the cells for utilization

# We want to take our internal stores and...





#### The DMII Story...

- You have too much sugar in your body
- Take medications to lower your blood sugar
- But wait...eat more sugar to prevent the medications from driving your blood sugar too low
- Eating more sugar worsens DMII and requires more medication over time



#### Action Plan

- Review the physiology from today, and ensure you understand the big picture
- This will help you become more mindful of how the lifestyle choices you make, trigger disease or healing
- Tomorrow, we are going to learn which data points matter, and what to expect