

Course 6

More food....

Q & A

Food Sensitivities

Many ask about testing for food allergies and sensitivities

Food allergies vs sensitivities

Testing limitations

If there is damage being done - regardless of the mechanism - we need to be aware and take action.

Elimination Food plan

Elimination can be the best tool

Full elimination all at once with systematic
reintroduction

Elimination single foods

Testing

IgE - allergy

IgG - sensitivity

Cyrex

Cross reactive foods

Inflammation food testing

Genetics to food

Grains

Can be cross reactive with gluten

Most whole pure form

Pull and check for sensitivities

Higher glycemic

Legumes

Vegetables that include beans, peas and lentils.

Very nutritious foods for those that tolerate

High folate, potassium, Iron and magnesium

Beneficial fats and soluble and insoluble fiber

Good source protein

<https://www.mayoclinic.org/healthy-lifestyle/nutrition-and-healthy-eating/in-depth/legumes/art-20044278>

Soaking and instant pot

Nightshades

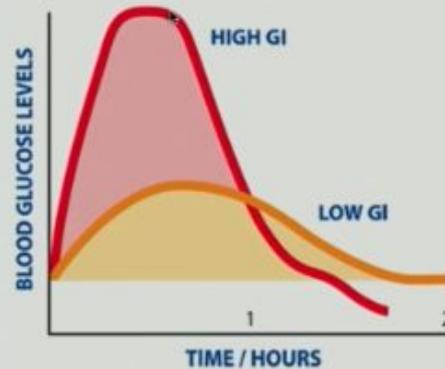
Comprehensive List of Nightshades

- Tomatoes 
- Tomatillos
- Bell peppers
- Eggplant 
- White and red potatoes, NOT sweet potatoes
- Chili peppers
- Garden huckleberry
- Cayenne pepper 
- Paprika
- Naranjilla
- Goji berries
- Marinara 
- Ketchup
- Tomato sauce
- Jalapeno pepper
- Hot peppers 
- Curry powder
- Chili powder
- Red pepper
- Pimentos
- Tobacco, chewing and smoking 
- Ashwagandha
- Cape gooseberry (also known as ground cherries, not to be confused with regular cherries)

Glycemic Index Versus Glycemic Load

Glycemic Index (GI)

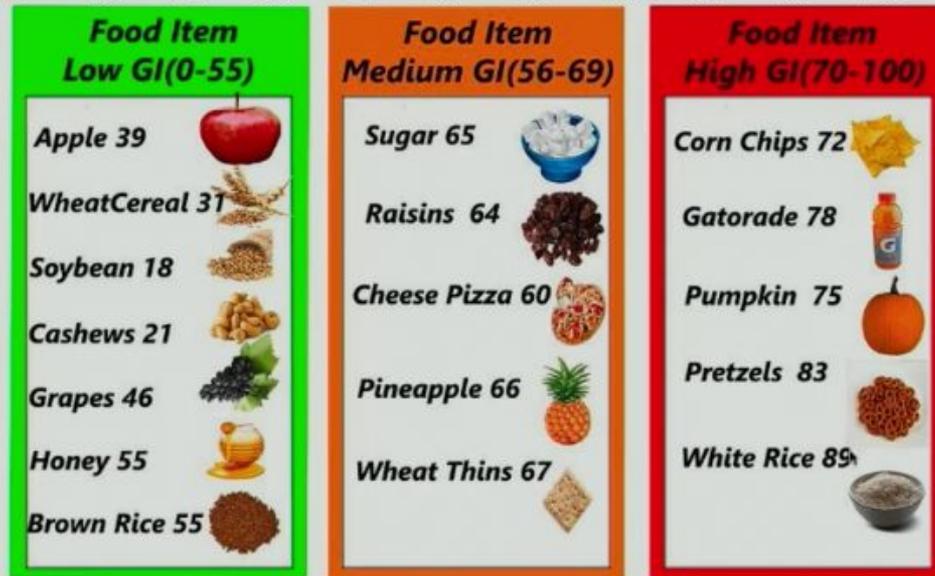
The **glycemic index (GI)** assigns a numeric score to a food based on how drastically it makes blood sugar rise. Foods are ranked on a scale of 0 to 100, with pure glucose (sugar) given a value of 100. The lower a food's glycemic index, the slower blood sugar rises after eating that food.



The amount of carbohydrate in the reference and test food must be the same.



GLYCEMIC INDEX CHART



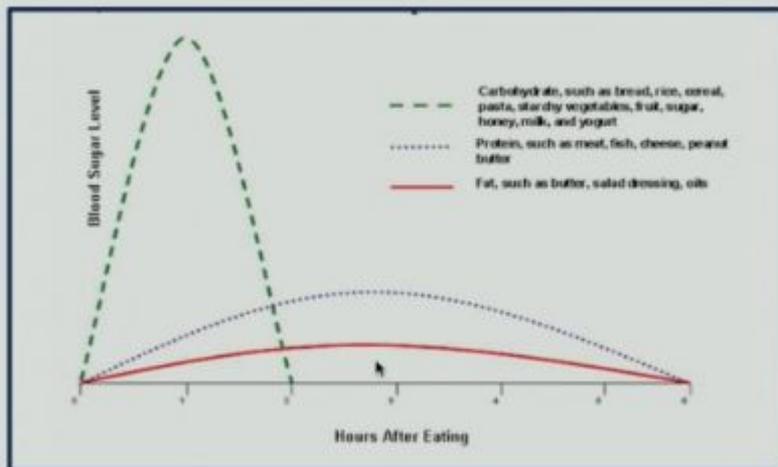
Glycemic Index

Low GI (<55), Medium GI (56-69) and High GI (70>)

Grains / Starches		Vegetables		Fruits		Dairy		Proteins	
Rice Bran	27	Asparagus	15	Grapefruit	25	Low-Fat Yogurt	14	Peanuts	21
Bran Cereal	42	Broccoli	15	Apple	38	Plain Yogurt	14	Beans, Dried	40
Spaghetti	42	Celery	15	Peach	42	Whole Milk	27	Lentils	41
Corn, sweet	54	Cucumber	15	Orange	44	Soy Milk	30	Kidney Beans	41
Wild Rice	57	Lettuce	15	Grape	46	Fat-Free Milk	32	Split Peas	45
Sweet Potatoes	61	Peppers	15	Banana	54	Skim Milk	32	Lima Beans	46
White Rice	64	Spinach	15	Mango	56	Chocolate Milk	35	Chickpeas	47
Cous Cous	65	Tomatoes	15	Pineapple	66	Fruit Yogurt	36	Pinto Beans	55
Whole Wheat Bread	71	Chickpeas	33	Watermelon	72	Ice Cream	61	Black-Eyed Beans	59
Muesli	80	Cooked Carrots	39						
Baked Potatoes	85								
Oatmeal	87								
Taco Shells	97								
White Bread	100								
Bagel, White	103								



Insulin Response to Food Types



Key points

The more fiber - the lower the glycemic index

Balancing foods at all times is important to glucose absorption

Understanding our individual effects of various foods is important

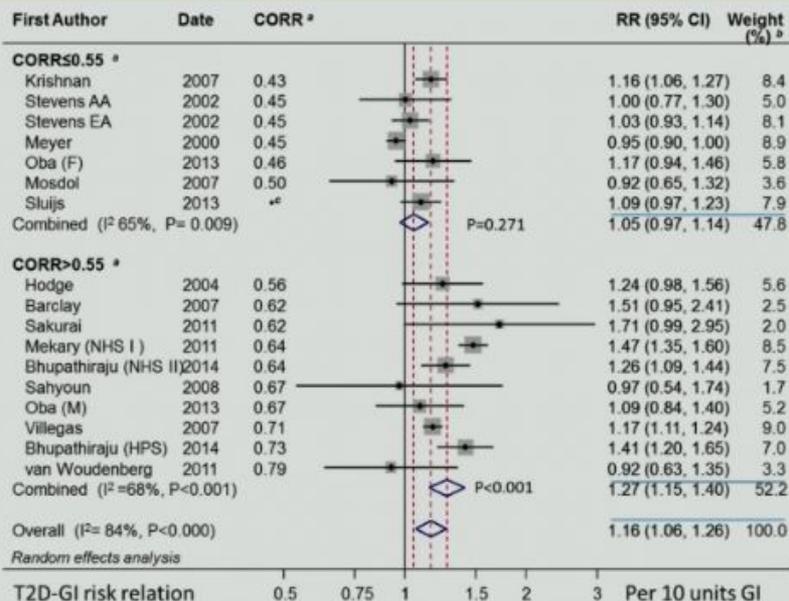
Easy to test

Information is power

Glycemic Load, Index

Net carbs

Dietary Glycemic Index and the Risk of Type 2 Diabetes



“In conclusion, among adults initially in good health, diets higher in GI or GL were robustly associated with incident T2D.”





Note gluten-free bread is refined and uses high glycemic sources such as tapioca, rice, potatoes, etc.

Some patients who go on a gluten-free diet and change to gluten-free pasta, bread, snacks, etc. may increase their insulin spikes.



Glycemic Index Versus Glycemic Load

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Glycemic Load (GL)

The glycemic load (GL) is an equation that takes into account the planned portion size of a food as well as the glycemic index of that food. Glycemic Load = $GI/100$ multiplied by the net grams of planned carbohydrate (net carbohydrate is the total grams of carbohydrate minus the dietary **fiber**).



Glycemic Index Versus Glycemic Load

Food	Glycemic Index	Serving Size	Glycemic Load
Peanuts	14	¼ cup	1
Grapefruit	25	½ large	1.4
Kidney beans	28	1 cup	7
Cheese pizza	30	2 slices	5.1
Skim milk	32	1 cup (8 oz)	4
Lowfat yogurt (plain)	33	1 cup	10.2
Apple, raw	38	1 medium	6
Pear, raw	38	1 medium	4
All Bran cereal	38	1 cup	9
Spaghetti (white, boiled 5 minutes)	38	1 cup	15
Spaghetti (white, boiled 15 minutes)	44	1 cup	18
Orange, fresh	48	1 medium	4.4
Banana, fresh	52	1 large	12.4
Snickers candy bar	55	1 bar	22.1
Honey	55	1 Tbsp	11.9
Brown rice (boiled)	55	1 cup	18
Oatmeal (cooked)	58	1 cup	11.7
Raisins	64	2 Tbsp	27.3
White rice (boiled)	64	1 cup	23
White table sugar	68	2 tsp	7
Popcorn (air popped, plain)	72	2 cups	5.7
Watermelon	72	2 cups	4.3
White bread	73	1 slice	10
Doughnut	76	1 medium	17
Russet potato (baked)	76	1 medium	23
Rice cakes	78	3 cakes	17
Jelly beans	78	10 large	22
Corn Flakes	81	1 cup	21
Carrots, boiled	92	½ cup	3.9

Sources: *Limas Panding Institute, Oregon State University, 2005*
<http://www.glycemicindex.com/>

Key	Low	Medium	High
Glycemic Index	55 or less	56 - 69	70 or higher
Glycemic Load	10 or less	11 - 19	20 or higher



Fiber

Fiber really important for how quickly glucose absorbed in the gut (also SCFAs and microbiome)

Higher fiber - less spike (slow glucose absorption)

Good for all dysglycemia issues!

Adding fiber to foods can help dampen glucose and insulin response

Supplementing any meals (or snacks) with fiber capsules can reduce glycemic load (and is a good binder!)

Fiber

1 capsule 1 g fiber (3-5 capsules with meal).

Decreased glycemic response (hypo or hyper) - significant impact!

Split with each meal - not at a separate time

Fiber can help the microbiome issues we see in DM: Increase SCFA's, change microbiome composition, Increase incretin

May initially get bloating and distention. Work up slowly! (Even if higher fiber diet - try to see if it helps!!)

Fermented Foods

Can be great for many

Not great with high histamine, hyperactivity

Organ Meats

Organic and grass fed best
Caution with high uric acid

Fish Sources

Stay away from farmed

Fresh, wild-caught

Check mercury levels in local lakes

Watch high toxin fish

<https://chriskresser.com/is-eating-fish-safe-a-lot-safer-than-not-eating-fish/>

Fish

Best:

SMASH

- Sardines, Mackerel, Anchovies, Salmon, Herring
- Rainbow trout Highest DHA/EPA.

Minimize (mercury)

- Tuna, swordfish, king mackerel, catfish
- Chilean sea bass, tilefish

Food Advice News headlines

Tricky to do studies

Not well funded

Often funded by wrong sources

Diet pop is good for DM - funded by Pepsi

Shakes/meal replacers

Stay away from Whey/dairy based

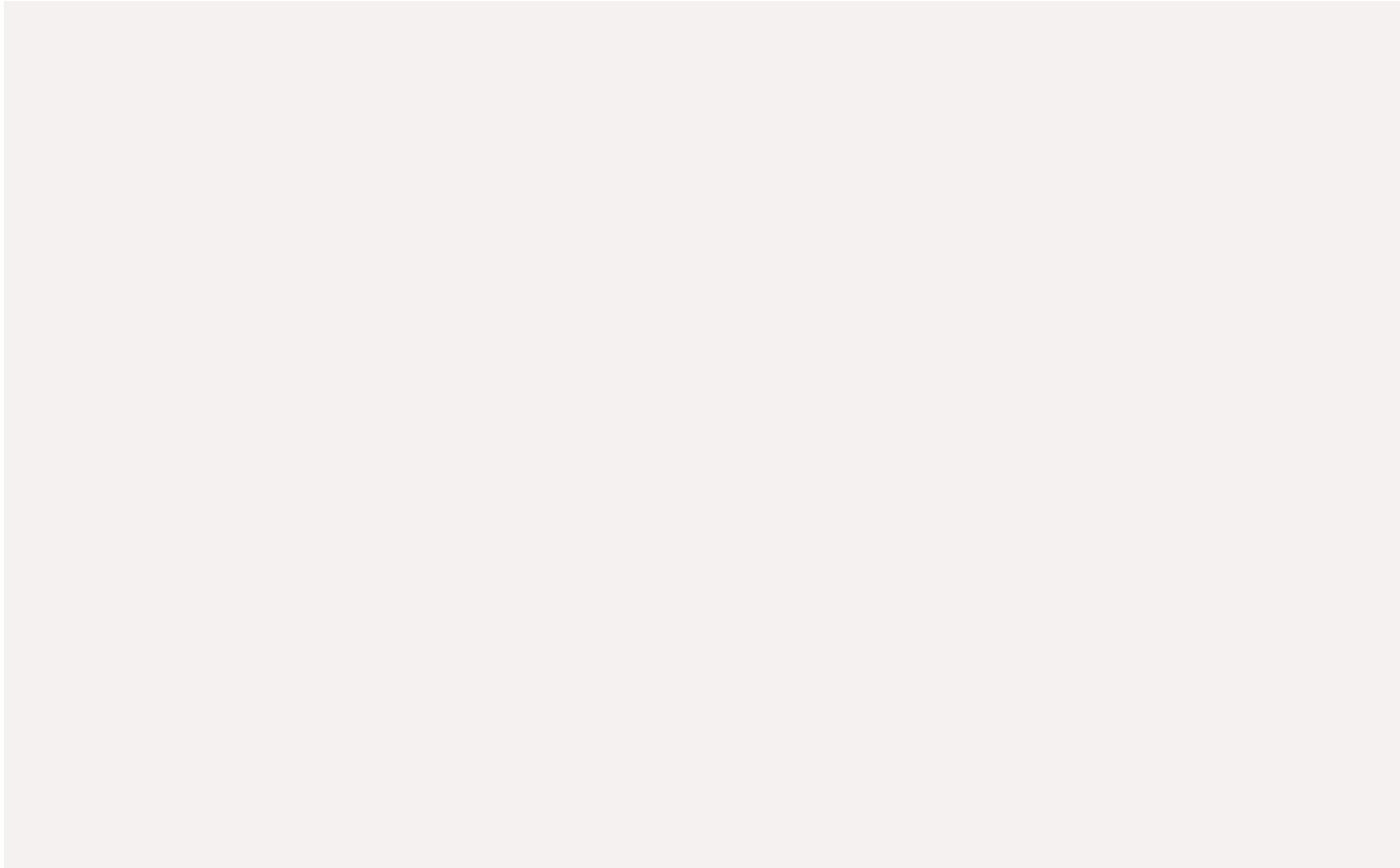
Stay away from soy

Watch carbs and sugars

Sweeteners
Gums
Additives



Food prep,
storage, and
cooking



LT food plans

Everything in moderation

Minus bad stuff

Minus your sensitivities

Caution a one size fits all

Detox

Detox options

Taste Cultivation

Try new foods multiple times

Try different cooking ways, different combinations
and spices

It does not need to be boring!