

A large, stylized sunburst graphic in shades of yellow and orange, centered in the background. The sun is a large circle with many rays of varying lengths and shapes extending outwards. The background is a gradient from light yellow at the top to a darker orange at the bottom.

# Sunshine Sharing Hour

September 28, 2010

# Don't Be Tricked by the Treats

There's  
Nothing  
"Sweet" About  
Developing  
Diabetes



# Understanding Diabetes

- **Diabetes is a high level of sugar in the blood**
- **Excess sugar spills into the urine**
- **Two types**
  - **Type I Diabetes**
  - **Type II Diabetes**



# Types of Diabetes

## Type I

- **Also known as juvenile diabetes**
- **Pancreatic cells that produce insulin are destroyed**
- **Insulin is low**
- **Requires insulin**
- **Natural cure unlikely**

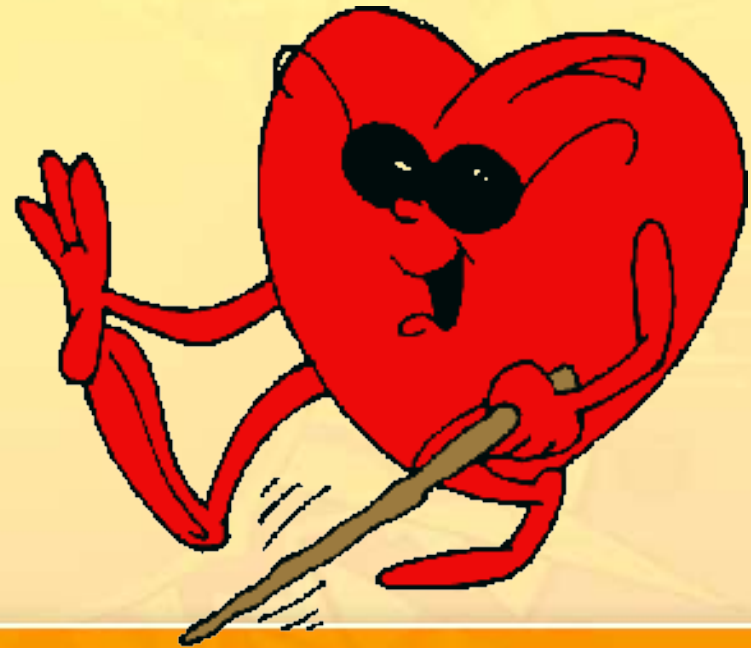
## Type II

- **Lifestyle disease**
- **Caused by cellular resistance to insulin**
- **Can be cured with lifestyle changes and natural remedies**
- **Insulin levels are high**

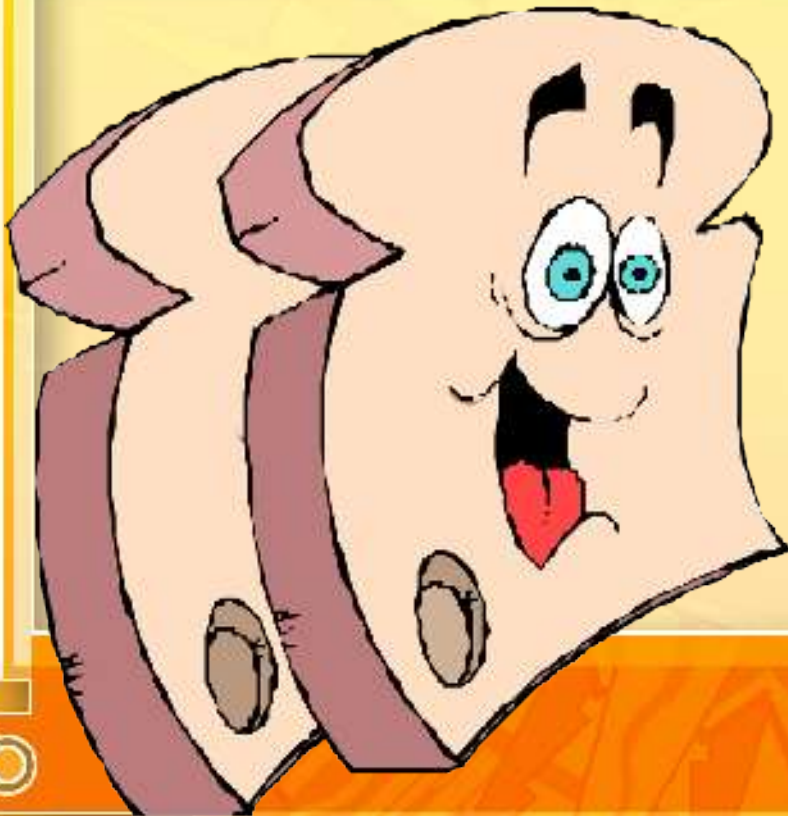
# Health Problems

## Associated with Diabetes

- **Increased Risk of Cardiovascular Disease (Heart Attack, Stroke)**
- **Loss of Peripheral Circulation**
- **Leading Cause of Blindness**
- **Weight Gain**



# Sugar Basics



- **All carbohydrates are broken down into simple sugars for use by the cells**
- **Sugar is a fuel for energy for muscle movement and brain activity, with the brain using more sugar than any other organ**
- **Blood sugar is called glucose**

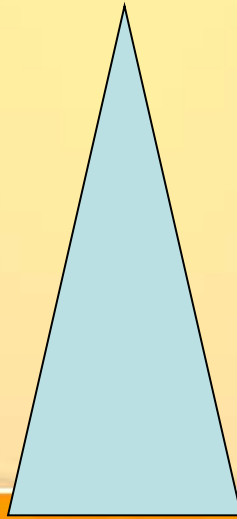
# Pancreatic Hormones

**Insulin**

Removes sugar from the blood and stores it to lower blood sugar levels

**Glucagon**

Brings sugar out of storage in the liver to raise blood sugar levels



# Insulin and Glucagon

## Insulin

- **Helps cells absorb sugar**
- **Storage hormone**
- **Stimulated by simple carbohydrates**
- **Depresses glucagon production**

## Glucagon

- **Releases sugar from the liver**
- **Mobilization hormone**
- **Stimulated by protein**
- **Depresses insulin production**



# Problems with Excess Insulin

- **Weight gain**
- **Increased risk of cardiovascular disease**
- **Increase in “bad” eicosinoids**
- **Inhibition of glucagon, which causes hypoglycemia.**
- **Increases insulin resistance in cells, which leads to type II diabetes.**

# Sample Glycemic Index of Foods

○ <b>Glucose</b>	<b>100</b>	○ <b>Pearl Barley</b>	<b>25</b>
○ <b>White Bread</b>	<b>70</b>	○ <b>Brown Rice</b>	<b>55</b>
○ <b>Wheat Bread</b>	<b>67</b>	○ <b>Apple</b>	<b>38</b>
○ <b>Baked Potato</b>	<b>85</b>	○ <b>Grapefruit</b>	<b>25</b>
○ <b>Table Sugar</b>	<b>68</b>	○ <b>Peanuts</b>	<b>21</b>
○ <b>Honey</b>	<b>55</b>	○ <b>Whole Milk</b>	<b>11</b>
○ <b>Popcorn</b>	<b>79</b>	○ <b>Fructose</b>	<b>19</b>

# Glycemic Load

- **Other foods can alter the overall glycemic index of a meal**
- **This is called glycemic load**
- **Fats, proteins and fiber consumed with a meal lower the glycemic load by slowing absorption of sugars**
- **Formula: Take total carbs, subtract fiber and  $\frac{1}{2}$  of the fat, if the result is over 10 the glycemic load is high**
- **Example: 20 grams carbs, 5 grams fiber, 10 grams fat = glycemic load of 10**

# High Glycemic Fruits

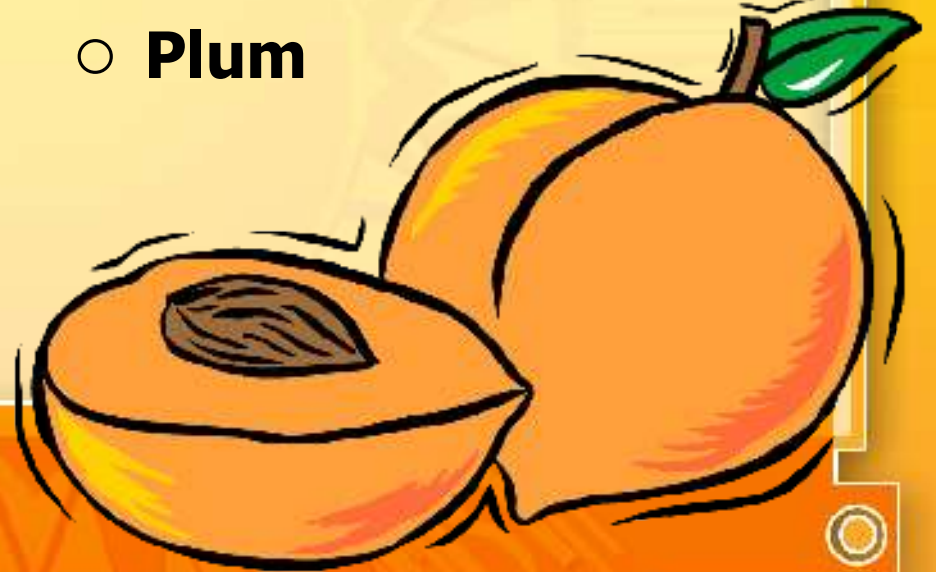


- **Bananas**
- **Blackberries**
- **Blueberries**
- **Cantaloupe**
- **Cranberry**
- **Dates**
- **Gigs**
- **Grapes**
- **Kiwi**
- **Mango**
- **Orange**
- **Papaya**
- **Pineapples**
- **Raisins**
- **Raspberries**
- **Strawberries**
- **Tangerine**
- **Watermelon**

**Most Fruits are High Glycemic Carbohydrates**

# Low Glycemic Fruits

- **Apple**
- **Apricot**
- **Cherry**
- **Grapefruit**
- **Lemon**
- **Lime**
- **Peach**
- **Pear**
- **Prickly Pear**
- **Plum**



**Eating Fruits with Nuts  
Lowers the Glycemic Load**

# High Glycemic Vegetables

- **Potatoes**
- **Yams**
- **Adding fat to these foods lowers glycemic load**



**Most Vegetables are Low Glycemic Carbohydrates**

# Low Glycemic Grains

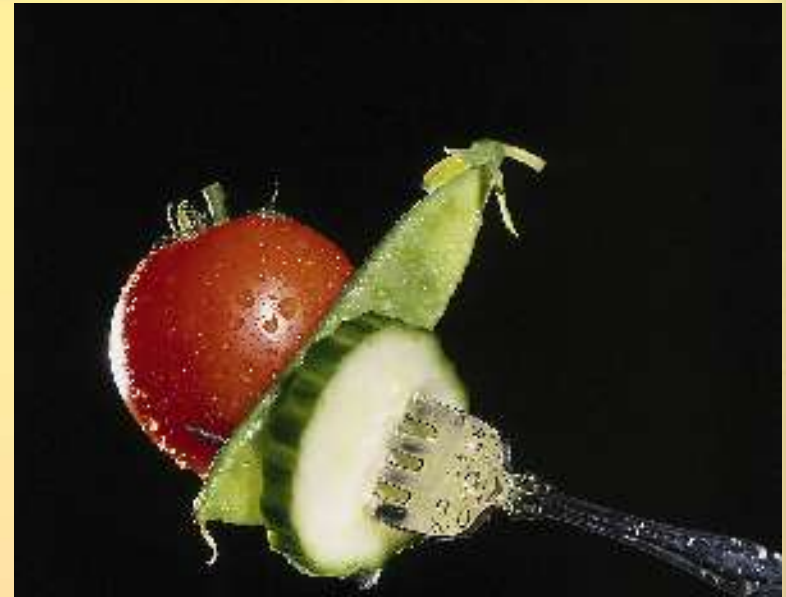
- **Pearl Barley**
- **Corn**
- **Rye**
- **Remember that adding a fat to a grain lowers the glycemic load**



**Most Grains are High Glycemic Carbohydrates**

# Diet for Diabetic “Cure”

- **Eat only low glycemic (non-starchy vegetables until blood sugar stabilizes)**
- **When blood sugar stabilizes add lean meat into the diet**
- **Gradually introduce fats, fresh fruit and whole grains into the diet if blood sugar remains stable**





# Non-Starchy Vegetables

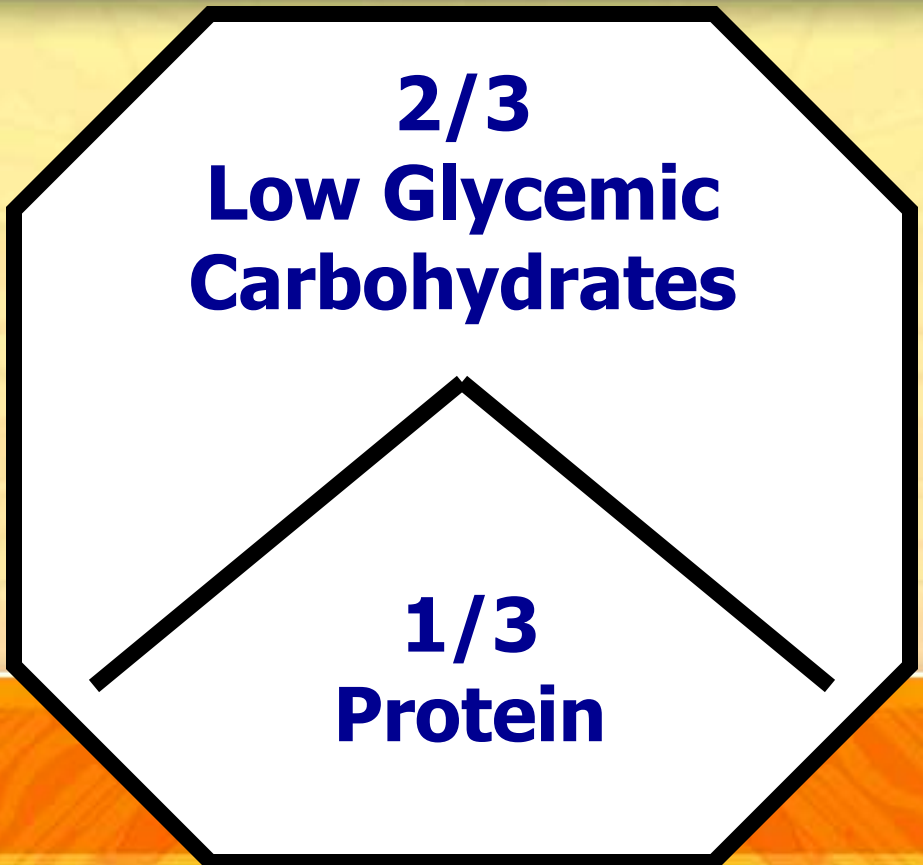
- **Asparagus**
- **Broccoli**
- **Cabbage**
- **Cauliflower**
- **Celery**
- **Cucumber**
- **Greens (turnip, mustard, beet, Swiss chard, etc.)**
- **Eggplant**
- **Green beans**
- **Lettuce**
- **Mushrooms**
- **Okra**
- **Onions**
- **Peas**
- **Peppers**
- **Squash**
- **Tomatoes**
- **Zucchini**

# Starchy Veggies

- **Beets**
- **Carrots**
- **Parsnips**
- **Potatoes**
- **Sweet Potatoes**
- **Yams**



# **“Zoning” the Plate**



**2/3  
Low Glycemic  
Carbohydrates**

**1/3  
Protein**

# Balancing Blood Sugar

- **Test blood sugar frequently and notice symptoms**
- **When blood sugar is high, use goldenseal to lower it**
- **When blood sugar is low use licorice to raise it**



# Transfatty Acids



- **Are formed either through anaerobic bacteria in animal products (spoiling) or through hydrogenation of vegetable oils.**
- **Include all of the following:**
  - **Shortening**
  - **Margarine**
  - **Hydrogenated or partially hydrogenated oils**

# High Quality Fats

- **Flaxseed Oil**
- **Omega 3 EPA**
- **Krill oil**
- **Olive oil**
- **Coconut oil**
- **Organic, grass-fed butter**
- **Hempseed oil**



# Stevia

- **Non-caloric sweetener, safe for diabetics**
- **Contains naturally sweet glycosides like licorice**
- **Can be helpful for diabetics**



# Xylitol

- **Safe for diabetics, hypoglycemics, children and pregnant women**
- **40% less calories and 75% less carbohydrates than sugar**
- **Heat stable**
- **Can replace sugar equally in most recipes**





# Nutrients for Insulin Resistance

- **Chromium**
- **Alpha Lipoic Acid**
- **Vanadium**
- **Zinc**
- **Omega-3 EFA**



# **Chromium GTF**

- **Works to balance blood sugar levels**
- **Helps control glucose and fatty acids**
- **Supports energy by aiding in transportation of glucose cells**
- **Reduces the body's need for insulin**

# **Alpha Lipoic Acid**

- **Strengthens the ability of other antioxidants**
- **Helps energy production**
- **Supports normal range blood sugar levels**
- **Aids the cardiovascular system and the nerve cell health**

# Herbs for Decreasing Insulin Resistance

- **Goldenseal**
- **Nopal**
- **Ginseng**
- **Devil's Club**
- **Huckleberry**
- **Cedar Berries**
- **Cinnamon**
- **Jambul**
- **Bitter Melon**
- **Bilberry**
- **Noni**
- **Fenugreek**
- **Banaba**
- **Bean Pod**
- **Blueberry leaf**



# Goldenseal

- ✓ Acts like a natural insulin to lower blood sugar levels
- ✓ Reduces insulin resistance



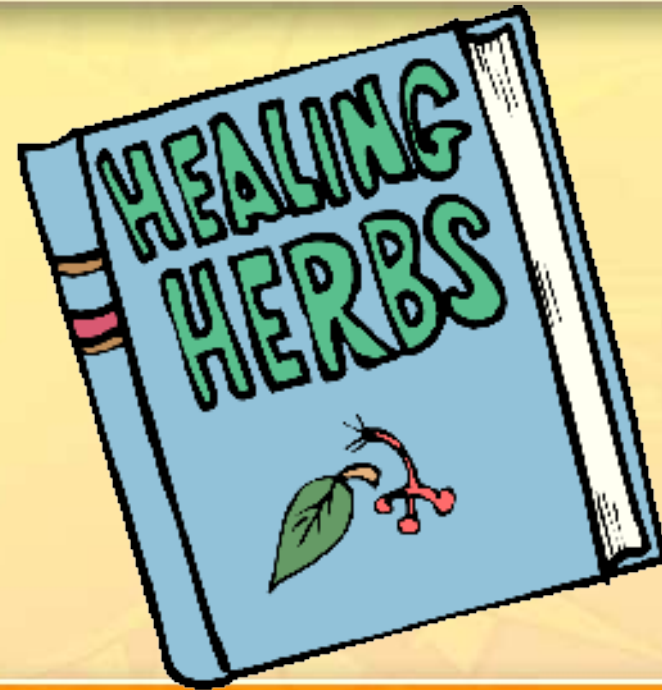
# Nopal



- **Low-glycemic index food**
- **Helps maintain blood-sugar levels in the normal range**
- **Contains pectins and mucilage that aid digestion**

# Herbal Formulas to Reduce Insulin Resistance

- **BPS**
- **Pro-Pancreas**
- **Target P-14**
- **Blood Sugar Formula**
- **Sugar-Reg**
- **HY-C**



## Properties

- **Nourishes pancreas**
- **Maintains blood sugar levels in normal ranges**
- **May also aid in digestion and liver function**

## Ingredients

- **Burdock Root**
- **Nopal Leaves**
- **Eleuthero Root**
- **Horseradish Root**
- **Golden Seal Root and Rhizome**



# Pro-Pancreas

## Properties

- **Helps balance blood sugar**
- **Supports circulation**
- **Mild diuretic action**

## Ingredients

- **Goldenseal**
- **Juniper Berries**
- **Slippery Elm Bark**
- **Licorice Root**
- **Garlic**
- **Yarrow**
- **Capsicum Fruit**
- **Dandelion Root**
- **Marshmallow Root**
- **Nettle Leaves**
- **White Oak Bark**

# Target P-14

## Properties

- **Supports normal insulin function**
- **One of the best formulas overall for type II diabetics**
- **Also helpful for type I diabetics**

## Ingredients

- **Chelated chromium and zinc targeted to the pancreas**
- **Same herbs as Pro-pancreas**

# Ayurvedic Blood Sugar Formula

## Properties

- **Helps slow the absorption of sugar**
- **Helps regulate blood sugar levels**
- **Supports liver function**

## Ingredients

- **Gymnema sylvestre**
- **Momordica charantia**
- **Pterocarpus marsupium**
- **Aegle marmelos**
- **Enicostemma littorale**
- **Andrographis**
- **Curcuma (turmeric)**
- **Syzgium cumini**
- **Azadirachta indica**
- **Picrorhiza kurroa**
- **Fenugreek**
- **Cyperus rotundus**

# Sugar-Reg

## Properties

- **Aids cell glucose transporters**
- **Helps the liver and digestion**
- **Helps reduce insulin resistance**

## Ingredients

- **Banaba**
- **Gymnema**
- **Bitter melon**
- **Nopal**
- **Fenugreek**
- **Chromium**
- **Vanadium**

# HY-C

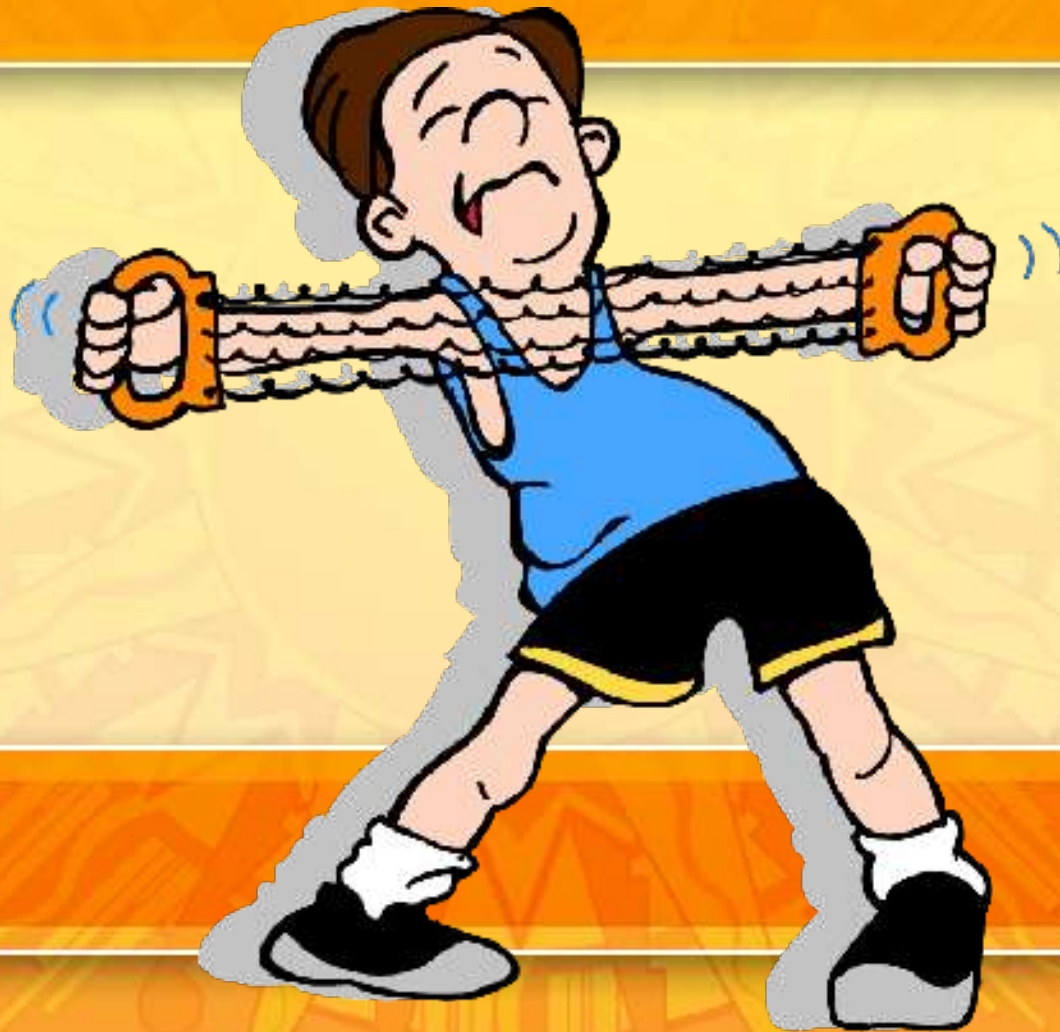
## Properties

- **Aids dryness, constant thirst with frequent urination**
- **Balances blood sugar**
- **Best formula for early stages of diabetes**

## Ingredients

- **Licorice root**
- **Pueraria root**
- **Schizandra fruit**
- **Moutan root bark**
- **Dendrobium**
- **Eucommia**
- **Rehmannia**
- **Asparagus**
- **Ophiopogon**
- **...and more**

# Exercise



# **Exercise and Hyperinsulinemia**

- **Exercise increases insulin sensitivity in cells**
- **The muscle burn in exercise shows that cells are taking up sugar without insulin**

# Exercise Guidelines for Diabetics

- **Consult your health practitioner for advice**
- **Wear a medical alert or identification card when exercising**
- **Never exercise if you have high blood sugar plus ketones. Diabetic ketoacidosis can result.**
- **Monitor blood sugar before and after exercise to prevent hypoglycemia.**





# **Circulatory Support for Diabetes**



# Garlic



- **Very helpful for diabetics to maintain good circulation**
- **Helps blood pressure**

# **MegaChel**

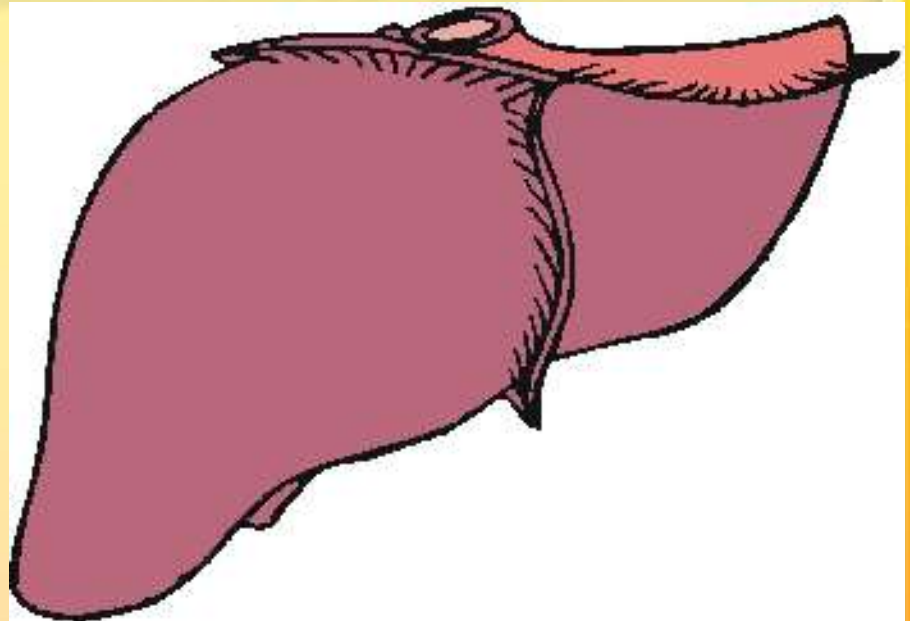
- **Supports the circulatory system**
- **Contains 11 essential vitamins and 10 minerals**
- **Helps maintains circulatory passageways**
- **Neutralizes free radicals**
- **Balances glandular system**
- **Very helpful for diabetics with circulatory and vision problems**

# **Co-Q 10**

- **Helps protect the cardiovascular system**
- **Encourages cellular energy production, helpful for heart energy**
- **Reduces oxidative stress and free radical damage in the circulatory system**
- **Maintains normal blood pressure levels**

## **Liver Formulas Can Also Be Helpful**

- **Enviro-Detox**
- **Liver Balance**
- **Blood Build**
- **Ho Shu Wu**
- **Liver Cleanse  
Formula (LIV-A)**



# Emotional Issues & Diabetes



- **The craving for sugar is associated with the craving for sweetness in one's life**
- **Diabetics often need more joy, pleasure and playfulness in their lives**
- **There is a playful child in all of us that needs to be nurtured**

# Flower Essences for Pancreatic Issues

- **California Poppy: seeking for the false "gold."**
- **Canyon Dudleya: inflated psychic life.**
- **Honeysuckle: nostalgia, living in the past.**
- **Nasturtium: overly dry and intellectual.**
- **Zinnia: lack of humor, overly somber**



# Questions and Answers

