

## METABOLIC SYNDROME

**What is it?** Pre-diabetes.

**What are the criteria?** (3/5 criteria needed)

### Adults

- \* Abdominal girth: men > 40 “, women > 35 “
- \* Triglycerides > 150 mg/dl
- \* HDL-C: men < 40mg/dl, women < 50 mg/dl
- \* Blood pressure: > or = 130/85
- \* Fasting glucose: > or = 100 mg/dl or 2 hr GTT level of > 140 mg/dl

### Children

- \* Obesity: > 95th % for age and gender
- \* Triglycerides > 110 mg/dl
- \* HDL-C: males < 40 mg/dl, females < 50 mg/dl
- \* Blood pressure: > or = 95th % for gender and height
- \* Fasting glucose > 100 mg/dl or 2 hr GTT level of > or = 140 mg/dl

### What are the medical consequences?

- \* *Hyperinsulinemia* (lots of damaging effects on kidneys, blood pressure, cholesterol production and inflammation in general, just to name a few)
- \* *Impaired Glucose Metabolism* (increased glycosylation = sugar sticking to important proteins and impairing function, i.e. neuropathy, retinopathy, etc.)
- \* *Hypertension* (heart disease, stroke, etc.)
- \* *Dyslipidemia* (elevations in LDL cholesterol and TG, decrease in HDL, etc.)
- \* *Visceral Adiposity* (abdominal fat creates lots of nasty chemicals leading to all the major chronic killers)
- \* *Dysfibrinolysis* (increased clotting issues)
- \* *Elevated LFT's* (fatty liver and increased inflammation, etc.)
- \* *Hyperuricemia* (commonly known as “gout”)

\* *Hormonal Imbalances* (PCOS, acne, hirsutism, male pattern baldness, etc.)

\* *Progression to Type II Diabetes*

**How do I avoid this for myself and my children?**

\* Decrease intake of high glycemic load carbs (white flour and sugar)

\* Increase vegetables, whole fruit, legumes and whole grains

\* Consume adequate protein throughout the day

\* Oil change: eliminate trans and decrease saturated fats, increase Omega 9 (i.e. olive) and Omega 3 fats (with fish or supplements)

\* Use nutritional supplements that support effective utilization of insulin

\* Get moving!