#### The "Real Food" Lifestyle (a.k.a. Primal, Paleo)



#### Moderation Foods

Fruits - Locally grown, in-season, high-antioxidant (berries, pitted fruit) High-Fat Dairy - Raw, fermented, unpasteurized Starchy Tubers, Quinoa, Wild Rice - Athlete's carb option Other Nuts, Seeds and Nut Butters - Great snack option

#### **Healthy Fats**

Animal fats, butter & coconut oil (cooking) Avocados, coconut products, olives & olive oil, macadamias (eating)

#### Vegetables

Locally grown and/or organic. Abundant servings for flavor, nutrition, and antioxidants.

#### Meat • Fish • Fowl • Eggs

Bulk of dietary calories: saturated fat (energy, satiety, cell & hormone function) and protein (building blocks, lean mass). Emphasize local, pasture-raised or certified organic.

Revised food guide pyramid for vital body-rebuilding nutrition leaving you more energized and satisfied

#### Disclaimer

- You have been eating longer than you've been walking
  - Not here to criticize
  - Here to present facts
  - Here to show what has worked for us, our family, and our performance
  - Take what you sounds interesting or what might work for you and your family, and leave the rest behind

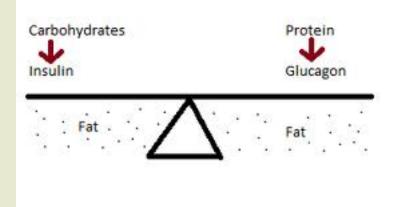
### Diet and your fitness

- Diet lays the molecular foundation to your fitness
  - Without a solid diet, the pyramid can't build
- 80% of your body composition is determined by diet
- Lean body mass is key
  Strive to lose fat and build muscle

Do not strive to lose "weight"

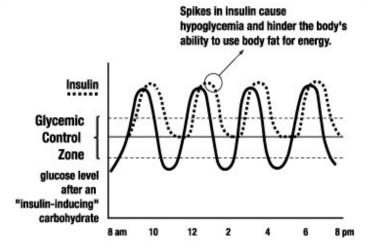
## **Glucagon and Insulin**

- Insulin
  - Hormone stimulated by carbohydrate consumption
  - Tells body to store glucose for later
    - Glycogen in muscles and liver
    - Excess in fat storage
- Glucagon
  - Hormone stimulated by protein consumption
  - Tells liver to release stored glycogen and fat
  - Inhibits release of insulin
- Keep your teeter-totter in check
  - Eat protein at every meal
  - Eat fat at every meal for stabilization of both hormones



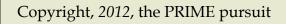
### Manic Depressive Nutrition

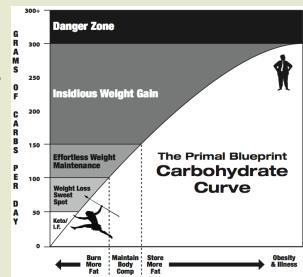
- The blood sugar rollercoaster
  - Eat too many high glycemic carbohydrates
    - Body makes blood glucose
    - Insulin produced in pancreas
    - Fat storage increases
    - Fat burning stops
  - Insulin spikes and leads to chronic elevation



### It's all about insulin!

- Carbohydrates control insulin; insulin controls fat storage
  - Consumption of slow burning foods → normal insulin response → nutrients delivered to cells for use and storage → effective fat metabolism and stabilized energy
  - Consumption of processed carbohydrates → spike in blood glucose → elevated insulin response by pancreas → "sugar crash" → cycle repeats → eventual insulin resistance
- Insulin resistance
  - Fat cells cannot release stored energy  $\rightarrow$  weight gain
  - − Excess glucose stays in your bloodstream  $\rightarrow$  inflammation
  - Pancreatic beta cells become exhausted  $\rightarrow$  Type II diabetes
- Hyperinsulinemia (chronically high levels of insulin) is root cause of:
  - Obesity
  - Platelet adhesiveness and macrophages to foam cells
     → accumulation of cholesterol in arterial walls
  - Reduced blood levels of nitric oxide  $\rightarrow$  high blood pressure
  - Glucose intolerance
  - Immune disorders
  - Mood dysfunction
  - Cancer
  - Arthritis
  - Stroke
  - Alzheimer's disease





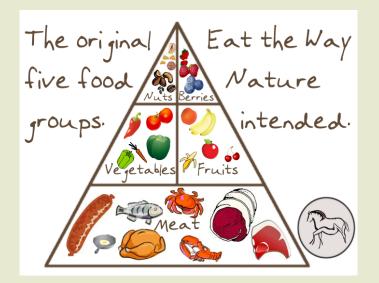


## It's not about cholesterol

- Cholesterol is critical to healthy cell structure and metabolic function
- High cholesterol is a symptom, **NOT** a cause
- Body produces 3-4x more cholesterol than you eat
  - Acts as bandaid at inflammation site
  - If inflammation remains, risks of clots arise
- No evidence that too much animal fat and cholesterol promote heart disease
- Inflammation and oxidation driven by excessive insulin levels and stress are risk factors for heart disease
- Cholesterol is only trying to help
  - Solution: reduce inflammation created/exacerbated by a carbohydrate centered diet and unhealthy fats

#### What you can do: Eat to fit your "genes"

- Eat LOTS of plants and animals
  - Quality sources of animal protein
  - Assortment of colorful vegetables and fruit
  - Healthy sources of fat
    - Nuts, seeds, their derivative butters, certain oils, avocados)
- Avoid these top things:
  - Chemically altered fats (trans, partially hydrogenated)
  - Processed/packaged/preserved food
  - Processed grains (esp. wheat and gluten)
  - Processed sugar
  - Artificial sweeteners
  - Legumes
  - Low fat dairy
- Shop the perimeter of the grocery store
- Forget about tracking calories and eat all approved foods in abundance
  - Make meat and vegetables priority



## Going against the grains...

- Offer minimal nutritional value
- Generate high insulin response



- Phytates (found in whole grains) inhibit absorption of minerals
  - Bind to Magnesium, Calcium, Zinc, and Iron and renders them useless to our bodies
- Gluten disturbs healthy immune function and promotes inflammation, leaky gut, and can lead to auto-immune disorders
- Lectins (found in whole grains) inhibit healthy GI function
- Excessive fiber causes malabsorption of nutrients

## Why Animal Protein

- Complete protein with ALL essential Amino Acids
  - Build, repair and maintain lean muscle mass
  - Nervous and immune system function
  - Build, repair and maintain bones, skin, hair, other tissues
- Vitamins A, D, and Bs, iron and zinc
- 3oz of lean beef provides all amino acids your body needs in 180 calories
  - Compare to 680 calories worth of nut butter or 1.5 cups of beans
- Americans are overfed but undernourished

#### Inflammation and Auto-Immune Disorders

- Can show up anywhere as anything
  - Allergies, arthritis, asthma, celiac disease, Crohns disease, leaky gut, malabsorption, lupus, chronic fatigue, fibromyalgia, ulcerative colitis, psoriasis, eczema, rosacea, endometriosis, rheumatoid arthritis
  - Inflammatory messengers in the brain: depression, anxiety, bipolar disorder, schizophrenia, Multiple Sclerosis, Parkinsons, Alzheimers,
- Diet can help and/or alleviate symptoms
  - You owe it to yourself to rule out bad diet as a trigger or exacerbation for any of these conditions

# The proof

- Similar diets prescribed by naturalist doctors to help symptoms of:
  - Malabsorption
  - Celiac disease
  - Crohn's disease
  - Rheumatoid Arthritis
  - Multiple Sclerosis
  - Autism
  - ADHD/ADD
- Some examples:
  - <a href="http://www.roostblog.com/roost/the-core-of-it-all-our-story.html">http://www.roostblog.com/roost/the-core-of-it-all-our-story.html</a>
  - <u>http://www.roostblog.com/roost/harvest-cake-with-vanilla-cream.html</u>
  - <u>http://comfybelly.com/2011/11/vegetarian-and-chicken-</u> <u>dumplings-and-our-crohns-timeline/#more-7050</u>
  - <u>http://articles.mercola.com/sites/articles/archive/2011/12/23/</u> overcoming-multiple-sclerosis-through-diet.aspx

#### Because no one is perfect...

• The 80/20 principle

(or 90/10 for all of you Type-A's out there :)

- Make well-intentioned but practical choices
- Eat "real" foods 80% of the time
- Other 20% rationed off for the inevitable:
  - Sensible vices
    - dark chocolate, ice cream, wine
  - Family get-togethers
  - Impromptu lunch out
  - Quick workout recovery
    - protein powders





## Steps to transition



- Clean out your pantry
  - Junk food extermination
- Load up on nuts, seeds and their derivative flours and butters
  - Almonds and their flour/butter, unsweetened coconut /coconut flour, macadamia nuts, etc.
- Stock up on healthy oils
  - Olive, coconut, various nut oils
- Sweet tooth suppression
  - Semi-sweet or dark chocolate
  - Raw honey, dates, or fruit for baking
- Explore spices
- Try varieties of herbal tea
- Stock up on healthier quick snacks
  - Larabars, unsweetened dried fruit, nitrate free beef jerky, trail mix
- Stock up on certain canned goods
  - Tomatoes, pumpkin, artichokes, coconut milk
- Start with one meal a day
- Eat protein and fat with every meal or snack

#### Favorite no-prep "primal" snacks

- Seeds and nuts (not bathed in oil)
- Hardboiled eggs
- Fresh fruit
- Dried fruit (preferably no sugar added)
- Beef Jerky (preferably nitrate-free)
- Canned salmon or tuna
- Cold, sliced nitrate free deli meat
- High quality cheese (if digestively tolerable)
   Full fat and organic
- Veggies cucumbers, peppers, cherry tomatoes, etc
- Larabars
- Unsweetened Coconut

## **Typical Day**

- Breakfast
  - 3 eggs, bunch of kale or spinach, 1/2 apple or celery with nut butter
- Animals Plants Plants It's Not That Hard. People.

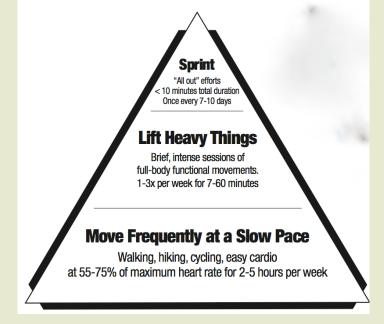
- Lunch
  - "Big Salad": 4 cups raw greens, chopped veggies, leftover protein from dinner (at least 3oz of animal protein), oil and vinegar, garnish with nuts
- Snacks
  - Celery with nut butter
  - Rolled up nitrate free deli meat in romaine lettuce leaves
- Dinner
  - Pick a protein, fill rest of plate with veggies or some fruit
  - Pick a recipe from blog

### References and favorite links

- <u>http://www.marksdailyapple.com/</u>
- <u>http://www.roostblog.com/</u>
- <u>http://comfybelly.com/</u>
- <u>http://theprimepursuit.com</u>
- <u>http://www.theclothesmakethegirl.com</u>
- <u>http://www.elanaspantry.com/</u>
- <u>http://everydaypaleo.com/</u>
- <u>http://paleomg.com</u>
- <u>http://wellnessmama.com</u>
- It Starts with Food by Melissa and Dallas Hartwig
- *The Paleo Solution* by Robb Wolf
- The Primal Blueprint by Mark Sisson
- Nourishing Traditions by Sally Fallon

#### Getting the most from your fitness routine

- Move frequently
  - Walk, hike, easy cardio (55-75% max HR)
    - Builds a strong blood vessel network
    - Provides O2 and fuel to muscle cells
    - Converts stored fat into energy
- Lift heavy things
  - Using natural, total-body movements
  - Pull-ups, pushups, squats, lunges
  - Short duration, high intensity
    - Develops/maintains lean muscle mass
    - Increases metabolism and bone density
    - Prevents injuries
- Sprint once in a while
  - Hill sprints, plyometric drills, bike/swim/run intervals
    - Increases energy levels and improve performance
    - Minimizes aging by promoting release of testosterone and HGH
- Know when to rest
  - Align workouts with energy levels
  - Get enough sleep
    - Optimal immune function
    - Promotes release of hormones that enhance brain and endocrine function





#### The risks of chronic cardio

- Overtaxes stress response
  - Overproduction of cortisol
    - Fatigue
    - Loss of lean muscle tissue
    - Suppressed immune system
    - Systemic inflammation



- Creates a pattern of stressful exercise and overeating
  - Burning more sugar drives eating more sugar
- Compromises development of power, speed, strength and lean muscle mass
  - Muscle imbalances and inflexibility
  - Aerobic endurance alone is narrow and minimally functional
- On the contrary, increased anaerobic efforts (i.e. Crossfit WODs, heavy lifting, sprinting) will actually improve your aerobic endurance