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# **SPORTS NUTRITION**

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# Sports Nutrition

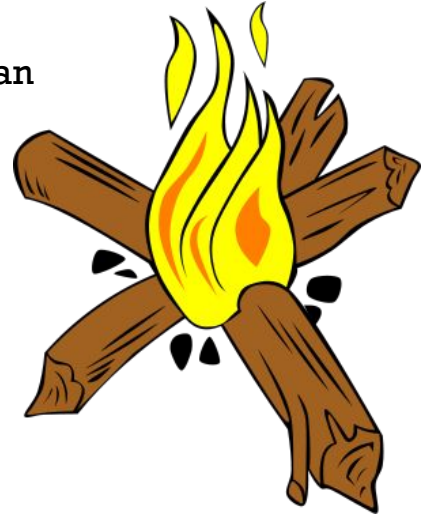
- Fuel Sources of the Body
- The role of Insulin and Cortisol in weight loss
- Understanding your body type
- Counting Macro's
- Pre workout Nutrition
- Post Workout Nutrition
- Supplementation

# Fuel Sources of the Body

## Carbohydrates Vs Fat

**Carbohydrates** = short, fast burning source of energy yielding an insulin spike

**Fat** = long, slow burning source of energy, no insulin required



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## Insulin & Cortisol

- Insulin is an anabolic hormone
- Cortisol is the hormone produced in stressful situations
- Getting a good balance of insulin and cortisol is key to reducing insulin sensitivity and over producing cortisol. Both factors increase weight gain

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## Somatotypes

### Endomorph

- Smooth round body
- Gains muscle easily
- Medium to large joints/ bones
- High levels of body fat
- Small shoulders, high waist, large hips
- Pear shaped physique
- Difficult to keep lost body fat off
- Attacks of fatigue
- Loses weight slowly

### Mesomorph

- Naturally lean/ muscular
- Medium to large size joints/ bones
- Naturally strong
- Broad, square shoulders
- Body fat evenly distributed
- Loses fat easily
- Efficient metabolism
- Gains muscle easily
- Responds quickly to exercise

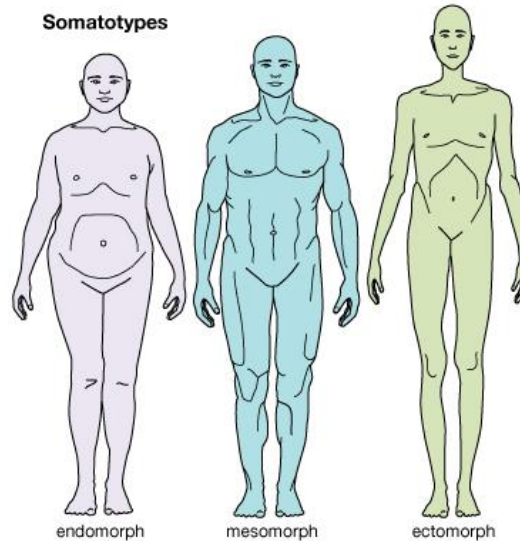
### Ectomorph

- Skinny, ruler appearance
- Lightly muscular
- Small joints/ boned
- Naturally low body fat
- Small shoulders/ chest/ butt
- Long arms and legs
- Difficulty gaining weight
- Fast efficient metabolism
- Hyperactive
- Difficulty gaining muscle

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## Somatotypes

Somatotypes



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## Nutrition for Somatotypes

### **Endomorph**

- Low Carb 15%
- Moderate Protein 25%
- High fat 60%

### **Mesomorph**

- Moderate carb 40%
- Moderate protein 30%
- Moderate fat 30%

### **Ectomorph**

- Higher carb 40%
- Moderate protein 40%
- Low fat 20%

### **Calculating Your Macro's**

<https://ketogains.com/ketogains-calculator/>

Macro's App

MyFitnessPal <https://www.myfitnesspal.com/>

# Sports Nutrition

## Diet

- Eliminate sugars and processed carbohydrates; pasta, bread, croissants + pastries, sugar,
- Stress Management Techniques:
- Avoid Trans Fats/ processed oils
- Eat quality fats to reduce inflammation and assist fat burning
- When starting out, eat 5 meals a day to keep insulin levels stable and avoiding spiking insulin levels that will
- Eat quality protein at every meal
- Vegetables, Beetroot, sweet potato, yams, potato, rice, quinoa, buckwheat, fruit
- 10 deep breaths/ Mindfulness Questions Meditation, baths, reading
- Canola oil, rice bran oil, vegetable oil, mars bars etc
- Avocado (oil), olive oil, wild caught fish (ocean trout, salmon, barramundi), coconut oil, walnuts, nuts, seeds, grass fed butter, organic meats
- WILD Caught fish, Grass fed/ organic meat and chicken, eggs, pork etc Tofu/ Tempeh, beans, legumes, lentils



December 19, 2017

FOODS	Calories	Carbs	Fat	Protein	Cholest	Sodium	Sugars	Fiber
<b>Breakfast</b>								
Oil - Coconut, 1 tbs	120	0g	14g	0g	0mg	0mg	0g	0g
Mushrooms, white, raw, 1 cup, pieces or slices	15	2g	0g	2g	0mg	4mg	1g	1g
Chard, swiss, raw, 1 cup	7	1g	0g	1g	0mg	77mg	0g	1g
Tomato Cherry - Cherry, 3 tomato	9	2g	0g	0g	0mg	3mg	1g	1g
Small - Egg, 100 g (1 egg)	120	0g	8g	12g	330mg	104mg	0g	0g
<b>Lunch</b>								
Avocado - Avocado (80g), 70 grams	31	6g	11g	1g	0mg	1mg	0g	5g
Carrots, raw, 0.5 cup chopped	26	6g	0g	1g	0mg	44mg	3g	2g
Aladdin - Mixed Green Salad, 142 gram	22	4g	0g	2g	0mg	14mg	3g	2g
Woolworths - Beef Mince Premium Cooked, 150 g	338	0g	19g	41g	150mg	90mg	0g	0g
<b>Dinner</b>								
Chopped - Capsicum, 50 g	10	2g	0g	0g	0mg	0mg	1g	1g
Squash - Zucchini, 0.5 cup chopped (raw)	10	2g	0g	1g	0mg	6mg	1g	1g
Sweet Potato - Raw, 100 g	86	20g	0g	2g	0mg	55mg	4g	3g
Broccoli, raw, 0.5 cup chopped	15	3g	0g	1g	0mg	15mg	1g	1g
Peas - Green, 0.2 Cup	21	4g	0g	1g	0mg	60mg	1g	1g
Carrots, raw, 0.5 cup chopped	26	6g	0g	1g	0mg	44mg	3g	2g
Generic - Salmon Pan Cooked, 226 gram	319	0g	14g	44g	10mg	0mg	0g	0g
<b>TOTAL:</b>	<b>1,175</b>	<b>58g</b>	<b>66g</b>	<b>110g</b>	<b>490mg</b>	<b>517mg</b>	<b>19g</b>	<b>21g</b>

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## Lifestyle and Training

- Focus on weight training = Building muscle increases **BMR**  
  
= Basal Metabolic Rate
- Do High Intensity Interval Training; continue burning fat for up to 48 hours
- Fasted Cardio
- Get Enough Sleep; lack of sleep puts your circadian rhythms out of whack. Research has shown that this increases cortisol levels, leading to carbohydrate and sugar cravings and reduces feelings of satiation, making you susceptible to overeating
- Manage your stress levels; increases in cortisol lead to fat storage around your vital organs to be used as an easy energy source in times of stress.

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## PRE Workout

### **Macronutrient Partition:**

- Protein + Carb i.e. Protein shake + banana

### **Supplements:**

- Coffee/ Acetyl-L-Carnitine/ BCAAs
- Citrulline Malate + Beta - Alanine

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## POST Workout

Post workout your body is insulin sensitive and any carbs or starches eaten will be shunted into muscle cells.

### **Macronutrient Partition:**

- Carbs + Protein in the **Absence of Fat** i.e. Chicken salad + quinoa

This aids muscle growth and recovery and increases metabolic response

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## Supplementation

- Acetyl - L - Carnitine/ L-Carnitine: shuttle fat for energy 1g dose
- Magnesium; relaxing muscles, energy production
- Fish Oil; reduce fat BF%, anti-inflammatory, brain function
- Vitamin C; Antioxidant, supports immune system
- Glutamine; supports immune system, healing the gut lining, strength and endurance in training
- BCAAs and EAAs; supporting muscle energy

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**Thank you**

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