

# IRON POWER

## BUILDING MUSCLE...BURNING FAT



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### FAT BURNING ACCELERATORS

#### CAFFEINE-Doubles Fat Burnt

**Used For:** Reducing body fat and perception of effort. Increasing workload capacity, muscle fibre recruitment, exercise intensity, endurance, alertness, concentration, and oxygen uptake, Glycogen sparing.

**Safety:** Up to 600mg/day (7 cups of coffee) considered safe<sup>1</sup>.

**Precautions:** Should not be taken by pregnant women (has been linked with reduced bodyweight of the newborn) or people with heart problems (excessive doses can cause extra beats of the left ventricle). Physical dependence can occur at daily dosages of 350mg and above (about 4 cups of coffee).

**Availability:** Health food shop (Ironpower's Streamline, Guarana, Kola nut), Chemist (No-Doz).

#### Increase Fat Burning by 100%

Caffeine significantly increases the burning of body fat as fuel during exercise<sup>2</sup>. **Compared with controls, up to 100% more body fat is burned by the subjects using caffeine.**

Caffeine is a powerful lipolytic agent, promoting the breakdown of stored fats. This leads to a dumping of fats (non-esterified fatty acids, NEFAs) into the blood where they can then be taken up by skeletal muscle to be oxidized.

Caffeine increases lipolysis by increasing blood adrenaline levels, and adrenaline is a potent internal lipolytic hormone<sup>3</sup>. Adrenaline can activate lipolysis not only from fat cells but also from within fat cells (muscle triglycerides).

When ingested with a meal, caffeine increases the rate at which the food is to be converted into usable energy. When caffeine is taken between meals, it causes fats to be transferred from deposits in the cells to the bloodstream. Here, as free fatty acids they can be used as energy by most of the organs of the body<sup>4</sup>.

*A high protein, low carbohydrate, low fat diet works best with caffeine for maximum fat burning. (Super Fat Burner diet at [www.ironpower.biz](http://www.ironpower.biz))*

A high carbohydrate diet negates the fat-burning effects of caffeine<sup>5</sup>. Caffeine also raises the activity levels of the body, which can mean that the energy derived from food is used up in exercise rather than be stored as fat. In addition, caffeine stimulates the temperature-regulating centres of the body, which in turn produces an increase in body temperature. To sustain this change, energy that might have otherwise been deposited as fat is used. Thus, even when the body is at rest, a greater amount of food is burned<sup>6</sup>. Although caffeine achieves peak blood levels about an hour following oral ingestion, the fat burning response does not begin until 3-4 hours after ingestion<sup>7</sup>.

#### SYNEPHRINE (Citrus Aurantium)

**Used for:** Enhancing fat burning and muscle preservation.

**Safety:** Should not be taken by pregnant women (may cause contractions).

**Precautions:** Banned by some sporting bodies. Competing athletes should check first if in doubt.

**Availability:** Health food shop (Ironpower's Streamline), Herbalist.

In a nut-shell, Synephrine causes fat to be released from its stores, enhances the burning of fat, and preserves muscle typically lost while dieting, without stimulating the central nervous system. This combination of functions makes Synephrine a valuable stand alone fat loss weapon. However, by combining it with caffeine and aspirin, its benefit s are synergistically increased. The stack stimulates the receptor sites in fat tissue. These receptors stimulate lipolysis, which is the breakdown of fat.

Many cell surfaces, especially muscle and fat cell surfaces, contain specific receptors known



Ironpower's effective Streamline formula combines natural sources of caffeine, synephrine, and aspirin (white willow bark) in a delicious drink concentrate. Streamline is available in selected health food shops, gyms, online at [www.ironpower.com](http://www.ironpower.com)

as beta receptors. When synephrine acts indirectly as a B-agonist, (substance that triggers beta receptors) it causes the activation of specific beta receptor sites, a sequence of processes are activated that can both induce the breakdown and use of stored fat for energy production and increase muscle metabolism.

*Methylxanthines (caffeine, aspirin) potentiate the synephrine activity by increasing release of the hormone nor-epinephrine, therefore combining or "stacking" caffeine and aspirin with citrus aurantium will increase the fat burning effects even further.*

#### References:

- 1, 4 & 6. Gilbert (1992).
2. Costill et al (1996) and Ivy et al (1979).
3. J .Appl Physiol, (1992); 72:1927.
5. Weir J et al. Med Sci Sports Exerc, (1987); 19:100-106.
7. Weir J et al. Med Sci Sports Exerc, (1987); 19:100-105.
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**Ironpower's complete range of muscle building and fat burning products may be viewed and purchased online from the ironpower website [www.ironpower.biz](http://www.ironpower.biz) or phone (03) 9690 0878 for more info.**