

The Oasis *Learn to Burn* Leanness Program

A Rational Strategy for Achieving and Maintaining Leanness

The basic “game plan” of the Learn to Burn leanness program is to maximize the rate at which your body burns stored fat, while consuming a diet that is low in fat. Unlike rodents, cows, and many other animals, humans rarely synthesize meaningful amounts of fat. There are exceptions – gorging on food for days at a time, in great excess of caloric requirements, will evoke fat synthesis, and chronic consumption of a fat-free diet will also lead to adaptive increase in fat production. But, under ordinary circumstances, the fat in our bodies derives primarily from dietary fat. This implies that if we boost our daily rate of fat burning, while keeping our dietary fat intake low, we should gradually drain our body’s fat stores until we gradually equilibrate at a much leaner physique. (Obviously, we can’t continue losing fat indefinitely, as our rate of fat burning will decline as our fat stores are depleted, until it equals our rate of fat ingestion and equilibrium is achieved.)

Weight control experts unanimously endorse regular aerobic exercise as a crucial key to achieving and maintaining leanness. This evidently reflects the fact that sustained exercise of moderate intensity promotes fat burning. However, relatively little attention has been paid to the metabolic context in which exercise is done – which can have a major impact on the rate of fat burning that is achieved. The most novel aspect of the Learn to Burn program is that it maximizes exercise-induced fat burning by nesting it within a daily “mini-fast”; exercising in fasting metabolism – when insulin levels are low - promotes selective use of stored fat, and fasting for several hours after the exercise prolongs the exercise-induced fat burn. When you do subsequently eat, low-fat, carb-rich food choices, moderate in glycemic index, promote satiety by re-filling your glycogen stores and promoting even blood glucose levels – but they won’t replace the fat you have just burned. This evidently implies a daily negative fat balance that over weeks and months will make you much leaner – and you’ll stay leaner as long as you stick with the program. This “mini-fast with exercise” strategy was first introduced by nutritional scientist Mark McCarty – now a consultant at Oasis of Hope Hospital – who has used it himself for over ten years, was generalized by Austrian physician Dr. Babak Bahadori in his “7 Step Program” for weight control, that has become popular in central Europe.

The Learn to Burn program provides sound advice on healthful low-fat food choices that will help you control your appetite and burn fat throughout the day. Low-glycemic-index carbohydrate foods are recommended, as they tend to promote moderate and even insulin levels. High insulin levels evoked by high-glycemic-index carbs bring fat burning to a screeching halt, and the wild swings of blood sugar often triggered by such foods can induce rebound hunger. So the Learn to Burn program stresses food choices that are both low in fat *and* glycemic index.

Rapid fat oxidation in the liver sends satiety signals to the brain, and also generates ketone bodies that can be used by the central nervous system as fuel. This mechanism is largely responsible for the hunger suppression that is typically achieved after days of

fasting or severe carbohydrate restriction. But ordinarily it takes several days for the liver to adapt to rapid fat burning. That's why the Learn to Burn program makes use of special dietary supplements that are intended to accelerate the liver's adaptation to fasting metabolism, so that the daily mini-fasts are readily tolerated.

Now that you understand the simple and logical concepts that underlie the Learn to Burn leanness program, here's how to do it:

1. Aerobic Exercise during a "Mini-Fast"

- **Pick the time of day that is convenient and most congenial for you to exercise:** in the morning, mid-day, or evening.
- **If you choose to exercise in the morning,** you should skip breakfast – no meals or snacks in the morning until lunch.
- **If you choose to exercise in mid-day,** you should skip lunch – no meals or snacks between breakfast and dinner. (Some call this the "Ramadan option", since during the month of Ramadan, Moslems fast between sun-up and sun-down.)
- **If you choose to exercise in the evening,** you should eat a very early dinner – by five, or as soon as you can get home from work. You should avoid any meals or snacks in the evening after your dinner. Your exercise should be done at least 2 hours after dinner, when your insulin levels have returned to a fasting level.
- **You can drink plenty of non-caloric fluids** during your mini-fasts; this will keep you hydrated for successful exercise, while also aiding hunger control.
- **You will be surprised by how well you feel during these mini-fasts.** When you exercise in line with this strategy, you will be in vigorous fat-burning metabolism for about 12 hours per day. This accelerated fat metabolism will enable you to feel energetic and hunger-free during your mini-fasts – particularly if you use the supplements, described below, that help the liver adapt rapidly to fasting metabolism. Think of it this way: you aren't starving yourself - by burning stored fat, you are finally "eating" food calories that you ingested weeks or months ago.
- **You can be flexible** in your choice of time for exercise. For example, if you prefer to exercise in the evening during weekdays, but would prefer to go out to dinner and evening entertainment on the weekend, you can switch your weekend exercise to mid-day. Or if you ordinarily exercise at noon, but one day you wish to attend a luncheon, you can use the morning exercise option that day.
- **For your exercise, do a moderate intensity workout** (50-60% VO_{2max}), preferably one in which you support your own weight (i.e. brisk walking, jog-walking, stair-climbing, elliptical gliders); if knee problems make this difficult, use a stationary bike. If you are exercising at the right moderate intensity, you should be able to carry on a normal conversation at the same time; high intensity exercise burns primarily stored carbohydrate rather than fat.
- After you've had a chance to improve your muscle tone and cardiovascular fitness, gradually increase the length of your exercise to **at least 40 minutes per session.** However, if you are very out of shape, it is prudent to start with a short duration that is comfortable for you, and then gradually increase it as your body adapts to

exercise. **Don't overdo it and injure or severely exhaust yourself** – the point is to establish a regimen that you can maintain on a regular basis.

- **Try to work out at least five times weekly.** (Once you reach your target weight, you may be able to reduce your exercise frequency a bit, but don't exercise less than three times a week.) On your non-exercise days, eat whenever you desire – but try to follow the food guidelines outlined below.
- Prolonged moderate-intensity exercise suppresses insulin, boosts glucagon, mobilizes fat, and thus is ideal for fat burning; increased capacity for fat burning will persist for several hours *after* exercise if you don't raise insulin by ingesting carbohydrate during this time.
- The people who get the best and most rapid results with HT are usually those who do the most exercise! **Exercise is crucial to achieving optimal benefit from HT.**

2. Proper Food Choices: Low Fat/Low Glycemic Index

- Food choices in HT are intended to **keep daily insulin secretion relatively low** and support glucagon production (aiding fat burning), while **minimizing fat intake.**
- **Avoid fatty foods** - fat should be no more than 15% of daily calories. No fatty meats, dairy products, or egg yolks. Minimize the use of oils in cooking, scan the labels of convenience foods for fat content, and be very sparing in your consumption of avocados and olives.
- A moderate daily intake of nuts or nut butters (no more than one ounce daily) is permissible, in light of evidence that these foods are markedly protective for vascular health. (Avoid nut butters that have added hydrogenated oils.)
- A very-low-fat diet, especially if accompanied by regular exercise, tends to decrease your daily insulin production by improving your body's sensitivity to insulin – and of course also puts less new fat in your fat cells.
- The **starchy foods** in your regular diet should have a relatively **low glycemic index** (that is, they should increase blood sugar gradually and moderately, to avoid excessive insulin secretion or – in diabetics – hyperglycemia.)
- Pasta, rice (preferably brown, long-grain and parboiled), beans, corn (whole corn or popcorn), bulgur wheat, barley, “old-fashioned” (not instant) oatmeal, and whole fruit are recommendable. **Avoid wheat flour products** (excepting pasta, sourdough and whole-wheat pita bread), baked or mashed potatoes (boiled are better), and sugar-loaded soft drinks (diet sodas are fine).
- **Beans** – particularly home-cooked beans – have an especially low glycemic index and are great for weight control. Eat beans frequently.
- Eat foods in a **physically intact natural form** when feasible – the glycemic index of whole-kernel grains is lower than that of flours. “Flourless” breads made from sprouted grains (e.g. “Ezekiel”) or intact grain kernels are far preferable to other breads.
- A table of glycemic indices – such as you can find in the popular book *The Glucose Revolution* - can help you choose appropriate starchy foods.
- Vegetables, vegetable juices, and whole fruit are strongly recommended – they are great for your long-term health as well as for weight control. Try to eat at least one

large salad every day. Whole fruit is the best dessert or snack. These foods are rich in potassium - crucial for the health of your vasculature and bones – as well as protective phytonutrients.

- With respect to **protein** intake, certain strategies in this regard can help you to minimize your insulin secretion and/or better control appetite. Both protein-rich diets and moderate-protein vegan diets can work well with the Learn to Burn program. Long-term vegans tend to be leaner than either lacto-ovo vegetarians or omnivores - possibly because their diet is quite low in the saturated fat palmitate, which may adversely affect fat burning. Vegans typically are at low risk for coronary heart disease, diabetes, and certain cancers, and vegan diets are highly desirable from an ecological standpoint. On the other hand, high-protein diets often also work well for weight control, presumably because they aid hunger control and keep daily insulin levels fairly low. If you choose a high-protein approach, make sure to choose foods that are relatively low in fat – especially saturated fat – and eat plenty of fruits and vegetables to offset the metabolic acidifying effect of a high protein intake (bad for your bones) .
- **Vinegar** can lower the glycemic index of a meal. Use vinegar as a salad dressing. You can also make a tasty “vinegar cocktail” by mixing a tablespoon of apple cider vinegar with about 2/3 cup of water, and adding a packet of artificial sweetener; take this just prior to or with your meal.
- **Alcoholic beverages**, in moderation (1 or 2 drinks daily), are permissible, and indeed may benefit your health if you can drink responsibly. However, alcohol in excess will bring fat burning to a halt, so never ingest alcohol during your mini-fasts. Remarkably, studies show that women who drink moderately but regularly are less likely to gain weight than are non-drinkers. (Sorry guys – this doesn’t work for you!)
- **Eat enough to satisfy your hunger – no calorie counting!** Make sure that you eat enough carbohydrate so that you have adequate fuel for your subsequent aerobic exercise. But use your common sense and your self-restraint – gluttony will sabotage any weight-loss program!

3. Supplementation for Easy Fasting

- To make the daily mini-fasts more comfortable, the Learn to Burn program offers supplements featuring the following food factors and metabolites:
- The availability of **carnitine** is rate-limiting for fat burning in the liver, and the liver gradually accumulates carnitine during the first days of a fast to boost its capacity for fat burning. By supplementing with carnitine, this adaptation can be achieved much more quickly.
- The natural fruit acid **hydroxycitrate**, by inhibiting the enzyme citrate lyase, helps to boost the activity of another enzyme, carnitine palmitoyltransferase, that works with carnitine to promote hepatic fat burning.
- The natural metabolite **pyruvate**, perhaps because it boosts the production of Krebs cycle intermediates required for complete fat oxidation, appears to enhance the rate of fat loss achievable with carnitine/hydroxycitrate supplementation. In rodents

studies, supplemental pyruvate has induced a marked thermogenic effect – enabling fat to be converted efficiently to CO₂ and heat.

- A recent study shows that **chromium picolinate** promotes appetite control in people who have carbohydrate cravings.
- The supplements **Brindall Trim**, **Lipidox**, and **Lipidox Powder** can be used with the Learn to Burn program. Brindall Trim features carnitine, hydroxycitrate, and chromium picolinate; Lipidox and Lipidox Powder provide these nutrients as well as an ample dose of pyruvate.
- Take a full dose of the supplement of your choice prior to exercise; you can take a further dose during the post-exercise fasting phase if you wish.
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- Note that these supplements do *not* involve drugs or even herbs – just nutrients, natural metabolites and food factors, all of which appear to be health-protective.
- This supplementation is not recommended for pregnant women, who in any case should not attempt to lose weight except as instructed by their doctors.

Does it Work? During a twelve-week open trial of the Learn to Burn program, overweight volunteers from the staff of Oasis of Hope Hospital lost an average of 25% of their initial fat mass. One gung-ho participant lost 46 pounds of fat in this time, while eating two meals a day and not counting calories – and even ladies in their forties or fifties, doing walking exercise, achieved substantial fat losses.

You don't need to do *everything* right *all* the time! If you can manage to exercise right, eat right, and supplement right the majority of the time, you can expect good results.

Fat Loss vs. Weight Loss: Note that in the first few weeks of the Learn to Burn program, lean mass often increases while body fat decreases. That means that **body fat will decrease faster than body weight**, so that your initial rate of *weight* loss may not be too impressive. After a month or more of the program, lean mass begins to decline as well, and weight loss tends to catch up with fat loss. So don't obsess about your scale weight when beginning this program. To evaluate your progress, it is best to have your **body composition** assessed periodically (by a personal trainer or physician) so that you can quantify your *fat* loss.

A caution to diabetics: When using the Learn to Burn program, monitor your blood sugar control as instructed by your doctor, and modify your medication usage as needed, with your doctor's assistance. If injectible insulin or sulfonylurea drugs are active during a mini-fast and exercise, a hypoglycemic reaction could result – so work out a proper medication schedule with your doctor. **Physician supervision is mandatory for diabetics!**

That's all there is to it! No drugs, no prolonged starvation, no calorie counting, no avoidance of health-promoting carb-rich foods. Nothing but fat-burning exercise, health-protective food choices, and safe, natural supplements. Remember:

*The Learn to Burn program is a healthful, sustainable lifestyle –
not a quick-fix gimmick*

Resources: Brindall Trim, Lipidox, and Lipidox Powder, priced at a moderate mark-up over cost, are available by mail-order from: **NutriGuard Research**, 1051 Hermes Ave., Encinitas, CA. Call (800)433-2402; outside the U.S. or Canada, you can call 760-942-3223. Or order via the web: nutriguard.com.