



## Obesity

### *How We Treat It With The Medifast Program and beyond*

Why do you need to lose weight? Is it a question of if you are *comfortable* with yourself? Is it a question of what some table noted as your “ideal” weight? Is it because your wife, husband, girlfriend, boyfriend, best friend, neighbor or rude kid that lives down the block says that you are overweight and need to lose weight? Is it because I nag you about your weight?

Does it really matter with any of those? The only questions I have for you are the following: do you want to live a **productive** life late into what is considered to be old? Conversely, do you want to *die an early death*? If you want to live a life that is healthy and full of energy and vitality late into your years, **you must not be overweight**. If you do not want to have an early death because of diabetes, heart disease, heart failure, heart attack, stroke, high blood pressure, cancer, or a host of other unseemly fatal outcomes, then **you must lose weight**. Remember that the number one killer in America and the world is heart disease and obesity is linked directly to it.

How do you lose weight? If you are like me, you have become an “expert” at losing weight. I have personally done quite a few different diets ranging from Optifast®/Medifast® to Atkins® to whatever fad there was. I took Phen-Phen and even had thyroid medication given to me (a quack did that one). However, what do you think it got me? A lot poorer and a lot fatter. Sometimes significantly fatter. In fact, the safest diets I did were the ones that didn’t work at all...because then at least I didn’t “rebound” or “yo-yo” my weight back up and beyond what it was when I started. I even started to “accept” my weight...except I knew that it wasn’t healthy and I didn’t plan on leaving this Earth sooner than when it was right for me.

However, what actually does it mean to be overweight? I know this may sound like a stupid question, but I have had to correct quite a few individuals in the past on this issue, so let’s define the term. When you step on the scale, you are not measuring how fat you are. You are measuring how much the center of the Earth is pulling (gravity) against you...ALL of you. Therefore, it is pulling against your clothes, your skin, bones, **fat**, muscle, organs, food that you recently ate, poop, water that you recently drank, and urine. Out of all of that, we are

only interested in two, i.e., the amount of fat and muscle that you have. Your goal should be to *increase* your muscle mass and *decrease* your body fat. Now in the final analysis, that means that you will lose weight, but probably not as much as what you thought. Again, remember that when you are doing both, you are *gaining muscle weight* and *losing fat weight*. You should overall lose more fat weight than gain muscle weight, but the net loss will still not be as much as what you originally planned. Therefore, do not set a goal of a certain weight, i.e., what you weighed in your youth. You may have had too little muscle on you then. You should instead set a goal of how much body fat you have. The mantra you should repeat frequently is, **“It’s not the weight; it’s the fat.”**

So, my approach to losing weight (and my own personal goal as well) is to not “shoot” for a certain weight, but to instead set a target body fat percentage. **Men should range between 7 – 15% and women should range between 17 – 22% body fat.** Rather than use the notoriously inaccurate calipers or bioelectrical impedance devices, we use a near-infrared device (Futrex 5000®) or the Bioanalogics ElectroLipoGraph® that can very accurately measure the amount of body fat you have. Even more accurate is the Norland XR-46 DEXA scanner that measures body fat using x-ray analysis of your tissues. This is normally reserved for bone density measurements, but it is a value that is calculated when the bone density scan is done.

Some may also question how we are able to build muscle mass while losing weight. First, you need to exercise. Now if you are extremely overweight, you should not be exercising for some time. You need to get the weight down to something a bit less dangerous so you will wait until we “clear” you for exercise. But the rest of us need to get out and do something. Start slow and work your way up. Have us refer you to a physical therapy program that will show you how to exercise and get you reconditioned (not being a couch potato). In addition, near the completion of their program, they will accompany you to your gym (if you are a member) and show you how to continue to exercise properly on the equipment there. Join a gym and set modest goals for yourself at first. As you progress, your goals will continue to go up. In addition, men and women frequently benefit from testosterone replacement therapy. Obese

men tend to be low in available testosterone<sup>1</sup> and so the correction of this deficit aids in correcting the obesity. Men would obviously get more testosterone than women, but both benefit from it. This is especially true if you are 40 years of age or older. This does not mean you will look like a bodybuilder, it just means that we want to return you to normal levels of hormones of a 30 year old healthy person. This has been shown to be quite beneficial and safe, no matter how old you are.<sup>2</sup> In addition, we will start you on a certain type of medication that will help your brain in adjusting to your new body weight. It is an antidepressant (Wellbutrin XL) but it is used for a different reason in this case. Studies have found that you need to take it for two years to allow your brain to continue to adjust to your new body weight and to help keep it off.

So let us start off this year (no matter the month) with a desire to change our old selves in for new ones and to **transform** ourselves into who we truly are. My staff and I are willing to help you meet that goal. Are you ready for the transformation? If so, then Medifast is a proven method for this weight loss.

**Medifast**<sup>®</sup> is a medically supervised, non-prescription weight loss program that has proven to be quite easy to follow and quite effective in getting the weight off. If you have more than 15 lb to lose, then you can be quite successful on the Medifast program. Medifast involves you drinking five special shakes and at least 64 oz (8 cups) of water a day – that is it. You do not eat anything else (except as an option – which we can discuss in person). This provides 70 grams of protein and 45 grams of carbohydrates a day. Sounds like the Atkins diet, doesn't it? Well, it is except with one big twist...it also provides only 500 calories a day. This is known as a **Very Low Calorie Diet** (VLCD). This is why I want to see you every two weeks to ensure that you are doing well on it.

When you first start Medifast, I recommend that you take an appetite suppressant, *i.e.*, phentermine, for the first seven days while your body adjusts to the Medifast and you enter into *ketosis*. Ketosis occurs when your body begins to break down fat only for energy. This process is known as the beta-oxidation or the “fatty acid” cycle. This is the most comfortable and easiest way that I have found. You will not need to suffer while you are waiting for your

body to go into ketosis. You will begin to notice that you are urinating much more than just the water that you are drinking...this is normal and means that your body is beginning to respond to the Medifast. You can easily check to see if you are in ketosis by purchasing Keto-stix<sup>®</sup> from your local pharmacy (diabetes section) and testing your urine. When the little chemical pad changes color, you are now losing ketone bodies (fat waste products) and you are losing fat (not muscle). In addition, ketosis gives you a feeling of satiety (not being hungry) and a lot of energy.

However, please remember that your brain cannot break down fat for food and therefore it must have carbohydrates to survive. This is why a *zero* carbohydrate diet is not only foolish it is also dangerous. You must have all five shakes a day (there is an alternative soup, oatmeal and a bar that you can have that can replace a shake with a maximum of two of the substitutes a day) with plenty of water. Fluids can include tea, coffee (no sugar and only light amounts of cream), diet sodas, but frankly you need to drink water as your primary fluid source. Also, watch the amount of caffeine that you take since you can become sensitive to what were normal amounts of caffeine in the past and get the jitters.

Depending on your medical condition and the medications that you take, you may have to have your medications adjusted. For example, Type II diabetics on insulin need to stop using insulin while on Medifast. Blood pressure medications are normally reduced in dose. I will make the initial adjustments to your medications when you start.

Once you have entered ketosis, I want you to start to exercise. If you have been a couch potato, I want you to start slow to be reconditioned. As I mentioned earlier, we can make a referral to a physical therapy program for a reconditioning program to get your body up to speed before joining a gym. In this way, you will not hurt yourself and you are more likely to continue to exercise for the rest of your life.

Initial measurements for our program will include your chest, waist, hips, arms and thighs, as well as body fat percentage. We can then repeat these measurements monthly to monitor your weight loss.

Once you are at your goal body fat, it is time to begin the “*realimentation*,” *i.e.*, restarting eating, phase. This can take up to six weeks (though rarely this long) as we slowly reintroduce food to your intake while slowly reducing the shakes that you drink. When you finally start to maintain your weight and not lose any more, then this tells us how many grams of carbohydrates you need a day to maintain your weight. Your diet can then be supplemented with other Medifast supplements in the **Taking Shape**<sup>®</sup>

1 Amatruda, JM et al. Depressed plasma testosterone and fractional binding of testosterone in obese males. *J Clin Endocrinol Metab*47:268-271.

2 Rolf, C. et al. Testosterone substitution of hypogonadal men prevents the age-dependent increases in body mass index, body fat and leptin seen in healthy ageing men: results of a cross-sectional study. *Eur J Endocrinol* 146:505-511, 2002.

program. This is a maintenance program to help keep the weight off. There are a few other options besides the **Taking Shape**<sup>®</sup> program and those can be explored when you are ready. Primarily, I want you on a low glycemic index diet (see the article on diabetes for the reference to the book that explains it.)

Finally, we come to the price of the program. Unlike other weight loss programs in Fresno, your visits can actually be billed to your insurance. If you have no insurance or have an HMO, we can offer a greatly reduced office visit fee specifically for this program. The cost of the Medifast supplements, however, is not covered and you must pay for them. The cost for four weeks of food is approximately \$270.00. One thing to consider, though, is that this is your entire food source for the next 16 weeks (at least) so your grocery bill will be dramatically reduced and this money can now be spent on Medifast products. I am trying to keep the costs down to allow as many of my patients as possible to get involved and change their lives for the better. In addition, if you would like to have a family member who is not a patient at this time on the program, they are able to come see me for this without any obligation to change their primary physician.

Some people have also asked me about the use of supplements to aid in their weight loss program. Some of these supplements can be added to the Medifast program to enhance the weight loss progress while others can be taken long-term to help with keeping the weight off. The supplements are as follows:

Conjugated Linoleic Acid<sup>3,4</sup> taken at a dose of 5 or more grams per day divided up into at least 2 doses has been shown to help reduce body fat.

7-Keto-DHEA<sup>5,6</sup> taken at a dose of 100 mg twice a day has also been demonstrated to aid in weight loss.

These supplements do not substitute for sound judgment or for a healthy diet. They are to be used as adjuvants in the control of your weight.

Are you ready to make a positive change in your life, which will affect you in more ways than you know? Are you ready to finally stop the yo-yo dieting and keep the weight off for life? If you are, then make an appointment to see me specifically.

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3 Blankson H et al. Conjugated linoleic acid reduces body fat mass in overweight and obese humans. *J Nutr*2000 Dec;130(12):2943-8.

4 Riserus U, Berglund L, Vessby B. Conjugated linoleic acid (CLA) reduced abdominal adipose tissue in obese middle-aged men with signs of the metabolic syndrome: a randomised controlled trial. *Int J Obes Relat Metab Disord* 2001 Aug;25(8):1129-1135.

5 Bobyleva V et al. The effects of the ergosteroid 7-Keto DHEA on mitochondrial membrane potential: possible relationship to thermogenesis. *Archives of Biochemistry and Biophysics*, Vol. 341, No. 1, pp 122-128, 1997.

6 Carlton M et al. Double-Blind Study Evaluating the Effects of Exercise Plus 3-acetyl-7-oxo- dehydroepiandrosterone on Body Composition and the Endocrine System in Overweight Adults. *J of Exer Physiol* Vol. 2. No.4, 1999.