

Combat Omental-Fat our 'Get-Fit-Tips' # 3b
Central Obesity
Part 2

This is part 2 in an ongoing series to raise awareness, understand and conquer internal, visceral (dangerous) belly-fat that stores on the Omentum within the abdomen. Part 1 is an entire discussion on Central Obesity and the over all negative health consequences, as well as an in-depth discussion on the different types of adipose tissue stored in our body and their respective characteristics

As I stated in part 1 of this series, many times the case is a bulging belly while all other areas of your body appear to be relatively lean, (especially in men who are approaching age 40 or over). The general rule is that we don't spot-gain fat, and this is still the case where subcutaneous (under the skin) is concerned. There is a place however where our body will spot-gain fat and rapidly at that, and that is within the abdomen beneath our muscles and over & around our organs, on the Omentum. The Omentum (Greater & Lesser) is a layer of adipose (fat) tissue that drapes off the stomach and hangs down underneath the muscles and partly attaches to your transverse colon. It serves many useful functions to include supporting your organs, storing visceral fat supplied directly from the small intestine, secreting immune-response factors to protect from peritoneal infection, binding cortisol, and supplying immediate fat to the liver via the Portal Vein for quick energy.

The omentum is yellow in color (from fat) and looks like thin, permeable webbing draped off the stomach but can fluctuate in thickness greatly depending on how much fat you're storing. It has the potential to expand enormously with fat globules swelling up to maximum capacity, squishing your organs and pushing against your abdominal wall, making your belly bulge yet perhaps still be quite firm to the touch since all the fat lies beneath the Abs-muscles. (Many happy-go-lucky, middle-aged men often almost affectionately refer to this localized phenomenon as their 'beer-belly', incorrectly giving beer a bad rap!)

The Omentum could be considered our 'Abdominal Fat Depot' as Dr. Oz characterizes it, and the liver has direct and immediate access to this omental-fat via the Portal vein. This can be good in times of need for immediate energy, but other times it is bad because the liver is bombarded with fat, cholesterol and inflammatory chemicals, stressing and contributing to 'fatty-liver disease' where the liver becomes engorged and inflamed with excess fat and its metabolic functions are impaired (damage may be reversible). (Excessive alcohol consumption further contributes to Fatty-Liver Disease.)

The Omentum also has many cortisol receptors. Remember, cortisol is a stress-response hormone secreted from the adrenal glands and is also beneficial in the short term during times of real fight-or-flight stress, or strenuous physical activity. Cortisol also balances melatonin to set our sleep-wake cycle or Circadian rhythm. But during chronic stress cortisol remains elevated and the omentum helps to clear this excess cortisol by binding to it and this uptake of the cortisol (steroid) hormone turbo-charges the omentum's ability

to store fat. Now we see the direct link between chronic stress and increased belly-size, and a legitimate case of spot-gaining fat!

As if this wasn't enough to cause your belly to swell internally, the omentum also sucks large amounts of insulin out of circulation so that the pancreas has to continue to over-produce more to help muscle cells absorb glucose out of the blood for fuel. An over-fat omentum feeds on insulin and is a significant, direct causal factor to insulin-resistance and eventually (adult-onset) Type-2 diabetes because it pulls so much insulin from the blood stream impairing its ability to transport glucose and nutrients out of the blood and into cells for energy and glycogen storage. (Exercise directly and immediately fixes this dangerous scenario: At once making your body more insulin-sensitive/efficient and more glucose-tolerant, more readily up-taking glucose - sugar - for energy.)

** (IFBB pro-bodybuilders take note: This is the primary cause of your distorted 'roid-gut: When you inject (abuse) insulin, not only are you endangering your life, your muscles are not the only tissue becoming hyper-anabolic...your omentum is being turbo-charged to grow and store fat. Growth hormone abuse is also causing your organs to hyper-grow in size - these combined factors causing your belly to swell internally while yet you still possess a lean 6-pack set of ABS. Meanwhile your health has been compromised for vanity. Your drug-engineered image does not belong in any 'Fitness' or health publication.)

Finally, an unhealthy, swollen omentum squishes your organs causing discomfort and secretes inflammatory chemicals throughout the abdomen and directly into the liver via the portal vein. So it is a contributor to systemic inflammation which we now know is a factor in almost all disease as well as 'Metabolic-Syndrome'. And it appears an over-fat omentum literally secretes the appetite INCREASING hormone LEPTIN and decreases levels of the fat-regulating chemical adiponectin.

So while a normal healthy omentum serves many important physiological functions, a fatty-omentum clearly sets off a chain reaction of health-problems that can quickly cycle out of our control. The most important and first step is become AWARE of this silent, and invisible layer of adipose tissue, which I have hopefully accomplished for you with this analysis. By now you can clearly understand that not all adipose or fat tissue is created equal: While both internal, omental-fat and subcutaneous fat both provide stored energy - subcutaneous fat, while it may not look good if obscuring your abs, is relatively harmless, inactive and does not directly contribute to and elevate obesity-related health risks. Internal, visceral omental-fat is a marker for of heart-disease, diabetes, syndrome-X, fatty-liver, and functions as an active organ.

Putting it all together: Lets over simplify and point out direct lifestyle causal factors that will cause your belly-fat to grow:

1. A SEDENTARY lifestyle (Causing insulin-resistance & Glucose-intolerance.)

2. A diet high in sugar and refined-foods (High-Glycemic Index foods, triggering insulin excess.)
3. A diet high in caffeine and other adrenal stressors (Triggering cortisol.)
4. Exposure to chronic stress (Elevating levels of cortisol.)
5. One or two giant meals per day, versus 5 to 6 smaller more frequent meals (Bombarding your omentum with too much fat & calories at one sitting - the immediate storage depot for fat.)

So there it is: Address these lifestyle causal factors FIRST, and see if this starts to slim your belly - and maybe allow you to live longer as well! Liposuction is not even an option for INTERNAL omental-fat - in fact there is no cosmetic surgical option. There is no diet pill that directly addresses it. Stimulant, thermogenic diet supplements will most likely serve only to further aggravate omental-fat by stressing adrenals (even if you are able to reduce subcutaneous fat.)

There is good news: Since omental-fat is the first and most easily stored early in the digestion process, and is directly available to the liver for energy via the portal vein, that means it is the first accessed for energy after immediate blood-based fatty acids and liver fatty-acids begin to deplete. Ironically the less dangerous subcutaneous fat deposited on top of your abs or on the back of your thighs weaved into cellulite takes much longer to access.

Remember though, during any kind of intense exercise you are primarily burning glycogen (carbohydrates) for fuel so fat is a little slower to come off and is a less efficient fuel source during exercise. But as long as you consistently exercise, limit sugar and refined foods, and create a small net-calorie deficit each day, you will eventually access all your hard-to-reach stored fat or adipose tissue in due time. You may think that doing low-intensity exercise would best serve you if you intend to burn primarily fat as your fuel source, but this strategy has proven ineffective: You simply don't burn enough over all calories during low-intensity training unless you can exercise for 2 hours or longer. Also, shorter duration, high-intensity exercise leaves your metabolism elevated for much longer due to the after-effects of EPOC: Excessive Post-exercise Oxygen Consumption.

You are now AWARE and ARMED with knowledge to prevent and combat internal, omental, belly FAT! Good luck in your conquest! And remember this is more than about vanity - this is about living longer and healthier.

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